

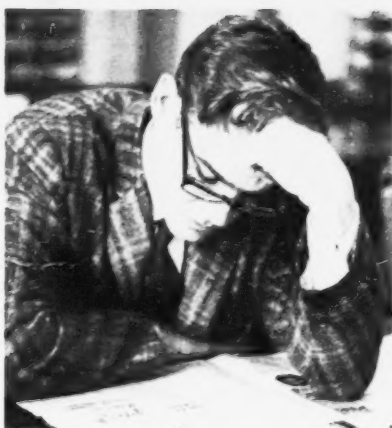
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A collection of nine papers reflecting a trend in institutional research toward analyses of the subtle social structures and processes that affect the education which students receive. The authors are researchers, college administrators, psychologists, psychiatrists, and sociologists. The appendix contains a paper 'The English Idea of a University,' hitherto unpublished in the United States.						
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THE STUDY OF CAMPUS CULTURES

The papers presented at
the fourth annual
Institute on College Self Study
University of California, Berkeley
July 24 - 27, 1962

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Western Interstate Commission for Higher Education
Center for the Study of Higher Education of the University of California (Berkeley)
Committee on Personality Development in Youth of the Social Science Research Council

THE STUDY OF CAMPUS CULTURES

Ralph W. Tyler
Howard S. Becker
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C. Robert Pace
Theodore Newcomb
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Edited by Terry F. Lunsford

Western Interstate Commission for Higher Education
Boulder, Colorado

Center for the Study of Higher Education
University of California at Berkeley

Committee on Personality Development in Youth
of the Social Science Research Council

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PREFACE

Research on campus cultures is one of the youngest and fastest-growing fields within the study of higher education. As "institutional research" by and about colleges and universities has increased, it has moved beyond the gathering of statistics on enrollments, space utilization, future needs for teachers, and budget-related problems. Researchers have turned the spotlight of their inquiry increasingly on the more subtle social structures and processes that surround and affect the education which students receive. It is with this area of inquiry that the lectures in this volume are concerned.

These lectures were delivered at the Fourth Annual Institute on College Self Study, co-sponsored in the summer of 1962 by the Western Interstate Commission for Higher Education, the Center for the Study of Higher Education of the University of California at Berkeley, and the Committee on Personality Development in Youth of the Social Science Research Council. The Appendix contains a paper on higher education in England (hitherto unpublished in the United States) which was included among background reading materials provided to Institute participants.

The Western Interstate Commission for Higher Education has co-sponsored three previous institutes on college self study. In 1959, the nation's first such institute was co-sponsored with Stanford University at Palo Alto. The lectures, published as College Self Study, were distributed in 1,500 copies and are still being requested though out of print. In 1960 and 1961, the Commission and the Center at Berkeley co-sponsored two institutes relating to Research on College Students and Studies of College Faculty, and published the lectures under those titles.

The Center for the Study of Higher Education is, of course, actively engaged in studies involving examination of campus cultures. For example, a major project now in progress at the Center is designed to determine the impact on students of attendance in eight selected colleges and universities, and involves considerable attention to student subcultures. The Committee on Personality Development in Youth of the SSRC has been involved for some years in encouraging and advising researchers on study in this area. The Center staff and the Committee include scholars who have made notable contributions

to the literature on campus cultures. It is to the knowledge and efforts of T. R. McConnell, Leland L. Medsker, and Burton R. Clark of the Center, and Ralph W. Tyler and C. Robert Pace of the Committee, that we owe, largely, our fortune in attracting to this institute a really distinguished faculty.

We are grateful to them, and also to the Carnegie Corporation of New York for its contribution to support of the Institute. WICHE staff time necessary to help plan and conduct the Institute is supported by funds from a long-term Carnegie grant to the Commission.

Terry F. Lunsford of the WICHE staff acted as Institute Director and edited this volume of lectures. Mrs. Virginia Boucher edited the bibliography, and copy was typed by Mrs. Patricia Halaas and Mrs. Ann Steward of the WICHE staff. Cover design and format are by Lee Gladish, WICHE publications specialist.

These lectures are published in the earnest hope that they will contribute to the growth and improvement of studies on higher education both in the West and elsewhere in the nation.

Robert H. Kroepsch
Director, Western Interstate Commission
for Higher Education

THE STUDY OF CAMPUS CULTURES

Ralph W. Tyler, Director

Center for Advanced Study in the Behavioral Sciences

Stanford, California

Before commenting on the present state of investigations of campus cultures, I have the privilege of welcoming you on behalf of one of the three sponsors of this institute, the Committee on Personality Development in Youth. The Committee was established in 1956 by the Social Science Research Council. It has three purposes. First, it seeks to interest social scientists in making studies of campus cultures. Second, it tries to find ways in which social scientists could be aided in such investigations so that the results would not only be comparable from one study to another but also could contribute to the development of social science. Third, it seeks to stimulate the use of these studies in dealing with practical questions that college administrators and teachers face. Because the interests of this institute are similar, we on the Committee are happy to have a chance to participate as sponsors, and to have members of the Committee on the program -- Robert Pace and Theodore Newcomb.

I

I have been asked to give a kind of general map like a road map, not spelled out in too much detail, to remind us where the study of campus cultures now stands. I shall try to do this in an illustrative way rather than a comprehensive one.

A brief historical review provides one basis of orientation. In the 19th and 20th centuries there were a good many publications which included descriptions of some facets of campus cultures in the United States. Most of them are found in the histories of particular colleges. Using extant documents and the recollections of former students and faculty, the college historian often sketched a picture of the campus organizations, the faculty-student relations, the living arrangements, and the extracurricular activities. These vignettes frequently included some detailed descriptions of the activities of social groups, literary societies and glee clubs, and also of the colorful conflicts and rioting which

seemed to characterize a good deal of the campus cultures in the latter part of the 18th century and in much of the 19th century. You will find, for example, a description of the Yale riot that took nearly a week for the police at New Haven to get under control. Probably because these conflicts were picturesque, they attracted the attention of the writers so that we get in these histories a clearer picture of them than we do of the constructive aspects of campus cultures. But we do get some notions of the value systems and the means of rewards and punishments used in those days by students and by faculties. You will also find descriptions of the treatment afforded faculty members who were deviant in such matters as religious convictions or social conventions. They were often ostracized by other members of the faculty. It seems clear from some of these college histories that students in those days, too, came to college because they believed it important for their education and found that their flesh was unwilling to be disciplined in ways demanded by authorities.

The kinds of concepts and categorizations that historians use in these books are common-sense conceptions. They do not involve the special knowledge or terminology of the social sciences, for they did not then have any very sophisticated ways of understanding either individual human beings -- as students, faculty members, administrators -- or groups of them. They use general notions such as "students need to let off steam," or "this custom was an antidote to loneliness," or "these things were done to show their manhood." These explanations have a certain obvious common-sense quality but do not help very much in getting a more precise and more nearly universal picture of human behavior.

Following World War I, there developed what was called The Student Personnel Movement, led by people who had been involved in the military psychological services, including such college and university presidents as Coffman of Minnesota, Scott of Northwestern and Hopkins of Wabash. The founders of this movement strongly believed that the problems of the expanding colleges which developed after the First World War and the provisions of more varied educational programs could not be handled without using psychological methods and knowledge in dealing with students. The "Movement" emphasized the need for understanding the student as a whole person and for the college to deal with his extracurricular life and his living arrangements, as well as his instruction. During the period from 1920 until 1935, there were dozens of doctoral theses written based on factual studies of some aspects of the student personnel problems or the student personnel movement. Examples of these are comparisons of drop-outs and grades of fraternity and non-fraternity students and comparisons of participants and non-participants in various types of extracurricular activities, as to their grade point

averages, the lengths of time they stayed in college, the percentage who got diplomas, and the like.

These reports were useful in providing a good deal of specific information, much of which was obtained from college records and from questionnaires. The limitation of the studies, as viewed from the present perspective, is the fact that student life was not viewed in its own right. The general assumption was that the total college or university was organized around the educational program; student activities were extraneous, like a bustle on a woman of the 17th century. These reports did not present the total organic view of adolescents' growing-up, including what they were seeking to get out of college. Nor did they view the faculty members in terms of their ambitions and aspirations. Hence there was no explicit recognition that some of the purposes of students and faculty would be satisfied and rewarded by the accepted doctrine of the college and some would not. Viewing the college arena as a stage for acting out varied roles was to come later. But, in spite of the meagerness of the viewpoints employed, these studies helped to substitute a great many facts for the unsubstantiated opinions about student personnel problems.

In 1929, William H. Cowley, now at Stanford, was brought from the University of Chicago to head the first division of student personnel research at the Ohio State University. He got research under way at that university and also stimulated others to conduct investigations through his influence on the Committee on Student Personnel of the American Council on Education and through his editorship of the Journal of Higher Education. He was familiar with the early sociological work of Graham Sumner and he encouraged studies of what he called "campus folkways" or "mores" in a score of collegiate institutions. Here was an effort to use some of the early concepts of sociology, those of Sumner, in looking at student life in its own right -- viewing the student, student life, and the student society as a social institution. This represented a movement away from the single view of the college or university in terms of its avowed purpose and beginning to look at it in terms of how it appears to the students themselves, with their varied purposes.

In 1933, the General Education Board gave a large grant to the American Council on Education to found the American Youth Commission. Shortly thereafter this foundation provided funds to the Progressive Education Association to support some of the work of its Commission on the Relation of School and College and its Commission on Human Relations. At about the same time, subventions were provided to several universities to conduct studies of adolescents. The occasion for these major investigations was the Great Depression which highlighted serious problems of American youth. Jobs for young people were very scarce, and they were remaining longer in school. The percentage of youth in high school

suddenly moved up, so that by 1942, about 80 per cent of the youth of high school age were in high school. The schools were not prepared for the large addition in numbers nor for the different varieties of students. It seemed to many that help on the problems being encountered could be obtained by comprehensive, systematic studies of youth. In conducting these investigations, social scientists were employed and their work focussed on youths in school, in college, and those unemployed. John Dollard, for example, for the American Youth Commission made a study of the disadvantaged youth; Allison Davis and others wrote Children of Bondage, on the particular problem of the Negro youth. Lloyd Warner, Havighurst and Loeb reported on the educational progress of youth in a midwestern city in a book, Who Shall Be Educated? They used some of the concepts of the anthropologists and sociologists in comparing the social classes and their influences upon education. Havighurst and Tauba conducted another community study in Illinois, finding among other things the relation of social classes and cultural conventions of those who succeed in school and go on to college and those who do not. Margaret Mead began her reports on youth as part of the work of the Commission on the Secondary School Curriculum. The Chamberlains, Dwight and Scott, followed closely more than a thousand high school seniors through four years of college. Among others conducting relevant research were Erik Erikson, Harold Jones, Jean MacFarlane and Carolyn Zachry. From this work of the 1930's, many of the research directions of today have emerged.

During the next decade, Newcomb made his intensive study of Bennington College, developing the insightful concept of the mediating educational influence of the student peer group. Esther Rauschenbusch and others at that time reported on their investigations at Sarah Lawrence College. Logan Wilson also published in 1943 The Academic Man, a sociological study of the college faculty member. In the same period, the American Council on Education, with funds provided by the General Education Board, sponsored studies in general education and in teacher education in the colleges. Robert Pace, who is a member of this institute staff, was one of the researchers on the investigation of teacher education. Reports were published on various facets of student cultures, such as social participation on the college campuses and the social adjustment, values, interests, attitudes and skills of college students.

Since World War II, investigations of campus cultures are numerous. I can mention only a few. Nevitt Sanford and his colleagues are completing a monumental study at Vassar. This study involved researchers from several disciplines, it included a group of alumni as well as students on the campus, and it obtained a great deal of information about the college environment, the environments from which the students came, and those

into which the graduates went.

Theodore Newcomb has been doing interesting work at the University of Michigan. One study has involved the control of living arrangements to see how peer group influences could be modified through intervention. The series of studies of the staff of the University of California's Center for the Study of Higher Education began with an investigation of diversity in higher education. This revealed not only the obvious things that are generally known about the differences in the numbers of students, in money available, and in the quality of the faculty, but also the variety in intellectual and social characteristics of students and the way in which the personality patterns of students vary among these institutions.

The number of projects now under way is indicated by the fact that 70 persons participated in the Andover Conference which was convened in 1959 by the SSRC Committee on Personality Development in Youth. To this conference were invited persons known to be carrying on studies of campus cultures and others who were planning to start them. The effort was to learn from each other, to try to get as common knowledge the experiences that each had already had, to learn about the research instruments each was using and about the difficulties being encountered. In general, the idea was to provide a clearinghouse of information for those who were conducting studies or were planning to do so -- information that would be useful for the further development of the field. The report of this conference has been widely distributed as new projects have been getting under way.

In general, the studies that have gone on since World War II have used more adequately than ever before the various disciplines, particularly anthropology, psychology, social psychology, and sociology. They have not done much yet with new concepts of political science and economics, but this is a possibility for the future. The character of these investigations is indicated by the reports appearing in the recent book edited by Nevitt Sanford, The American College. This volume also illustrates the attempt to draw upon the social sciences to provide a more adequate theoretical conception of the college cultures. For example, Fishman there points out that most of the old notions about trying to assess and predict college success by taking a few intellectual aptitude test scores have reached the limit of their usefulness. Further efforts to sharpen these predictions he believes to be a blind alley and he pleads for a broader conception that takes into account the interaction between the environment and the student and recognizes that college is not a uniform unity.

As another example in that volume, Christian Bay argues for a

social theory to guide further studies of higher education. Frank Pinner, in his chapter, draws heavily upon political-social theory, while Sanford and Joseph Katz propose the use of personality theory as a basis for the study and planning of the curriculum.

II

This concludes this sketchy historic background. The second topic that I was asked to deal with is the relevance of these studies to the practical works of the college.

I think it is safe to say that a majority of the people who teach in colleges and universities have not given much thought to what education is, but they have a notion that it brings about certain desirable changes in students. Thus they talk about an educated person, one who is different from the uneducated. He is changed as a result of his college work. And although they have not spelled this out, they would accept in general the definition of the educational psychologist, that education is a process for changing human behavior in desirable directions. Many college teachers do not explicitly recognize that, if they are to help a student to change his ways of thinking, feeling, and acting, they need to be guided by some notion of how learning takes place. But most of them do have in mind the idea that the student should practice whatever he is expected to learn. They talk about his having a chance to carry on certain laboratory skills in the sciences so that he can become skillful. He has to have a chance to carry on various kinds of problems if he is going to learn to solve problems in mathematics or in other fields. He has to have a chance to formulate certain generalizations if he is to try to understand them; state them in his own words, and so on. I think most teachers realize that it is the student himself who must do what is required to learn and that a faculty member cannot learn for the student. The teacher can provide kinds of situations and stimuli and guidance and rewards for behavior, but what the student does is the critical thing.

Now, with this general view in mind, college teachers can get further understanding and guidance from the results of current studies of campus cultures. These studies show, for example, that the college environment provides many opportunities for learning that have not usually been thought about. If I come here as a student to the Berkeley campus, the amount of my time that could be devoted to learning things that were never put down in the curriculum and never thought about by the faculty is far greater than the amount of time that I could spend if I wished to devote myself to the courses that I take. Furthermore, some of these learning opportunities provide conflicting learning outcomes.

As another example, some of the studies show that things which serve as rewards for some students operate as punishment for others, and that most students are more rewarded by the comments of other students than they are by grades given by the faculty. They may be more rewarded by feeling that they have shown up the faculty than they are by following along successfully with what the faculty wants. Such reports provide new leads for some teachers.

This expectation that studies of campus cultures will give deeper understanding to teachers is being demonstrated in colleges. Teachers report that they now realize that there is much more to understanding college education than is found out by asking how a class lecturer acts or what kind of assignments he makes, or what extra-curricular activities the students engage in. Increasingly, findings from these investigations are being examined by the faculties of these institutions because they thereby obtain better understanding of their students and of teaching and learning.

The second aspect is the relevance of these studies to administration. At least three kinds of relevance can be noted. Such studies are relevant for the administrator who is concerned with the problems of learning, in helping him to see more clearly what he or the administration as a group might do in helping to facilitate better learning. One case in point, for example, is the recent decision of one of the well-known colleges to eliminate fraternities. Their study revealed that the demands of the fraternity, often coming from sources outside the college campus itself, had greater influence upon the students than conditions within the college. Since fraternities were no longer necessary in this college as a means of providing friendship groups or housing or feeding for the students, the administration decided to drop fraternities and to find better ways to facilitate desired learning. Another illustration is in the field of faculty development. From the studies made by Lucile Allen at Austin College in Texas with regard to the hopes and aspirations of college faculty members, some administrators are recognizing the greater complexity of problems of faculty development than is expressed by the folklore of the promotion system. They realize that the specifications of a promotion system in a college or university have very little relationship to the actual motivation and development that takes place. Some of the current investigations outline the points at which the faculty member looks outside the college or university for his next step, and the points at which he is more motivated by values other than those that are intended by the promotion system. Ultimately this new understanding results in modifications in practice to deal with the problems identified.

These studies also are useful in relation to communication. They show that the communication system is very selective. This is in

contrast to the democratic theory which postulates a continuous process of formulating goals and values which involves all the people in it, so that there are shared goals and values to guide and control the group, thus making restrictive directives unnecessary. A study of any institution, even the small ones, shows that in fact the faculty and students often believe the goals and values are formulated by somebody outside them and that they understand these goals and values inadequately. In one case, for example, only about 35 per cent of what the president and dean thought they were communicating to the faculty actually reached them, and a large per cent of distortion reached them. The findings of such studies point to needed improvements in the communication system.

The third aspect is the relevance of this research to the development of the behavioral sciences. Persons studying the behavior of men in relation to other men must find themselves one or more situations in which men are living and relating themselves to other men. These situations are the laboratories of the behavioral sciences. Possible laboratories are many: the home, the church, the factory, the farm, the halls of government, for example. But one close at hand is the college itself. For example, when one is studying the sociology of institutions, it is very helpful to compare the college as an institution with other institutions, such as the hospital, the factory, or the military establishment.

A sociologist doing research in this field would be overlooking an important source of data if he did not study the college as one major social institution. It furnishes most of the features of institutions that people are concerned with; it provides many of the types of human behavior; and it is more readily available for study than some other social institutions. Also, in a college one has a chance to see new generations coming through every four years, whereas in some business institutions change is slower. It may take 20 years before a new young man comes into this or that division of the factory. But every year students are coming in and going out of college. The college, then, provides not only an appropriate context for studying many of the more basic questions of human behavior such as motivation, organization, perception, association, communication, control, and so on, but it also furnishes a setting for investigating questions regarding changes over time. I believe that the college and university situation gives the behavioral scientist a wide variety of conditions and persons for study which enables him to test hypotheses in ways that would be difficult in many other situations, and yet these generalizations need not be limited to the conditions within the school or college itself, but can lead to universal hypotheses which can be tested in further research.

III

The next topic that I have been asked to talk about is the main types of research conducted on campus cultures. Since some of this has been implied by my earlier descriptions, I shall do it very hastily. I've implied, for example, that most of the material was obtained until 1920 by the historical method, in which the effort was to reconstruct the past from extant records and to be a faithful reproduction without questioning much the theoretical background that sought to explain it. Since that time we have had quite a range beyond the historical material.

The anthropologists' way of employing participant observations plus informants, for example, is one of the methods that has been successfully used. Howard Becker, who is here, has done very important and interesting work using techniques of that sort. The study of medical school students at the University of Kansas is, I think, almost a classic of this type.

A number of studies have utilized the survey research interview procedure. Among the more recent ones are those of James Davis and Peter Rossi of the National Opinion Research Center. The publication entitled Stipends and Spouses is a report of their study of graduate student and his financial support, and of the role of wives in making it possible for graduate education to go on in this country.

Some studies use clinical psychological methods of investigation, perhaps best illustrated by the work that was done earlier by Erik Erikson and by the recent work of Nevitt Sanford.

The use of the questionnaire has, of course, been very common in sociology and many of the studies by both sociologists and psychologists have used types of questionnaires about activities, values, sociometric data, identification objects, and the like. Inventories perhaps should be called questionnaires, although often the former term is used to make it more general in type. There is wide use of various types of inventories like the multiphasic and the variations developed here at the Center for the Study of Higher Education to get at personality and other psychological patterns. The inventory called the College Characteristics Index by Pace is employed in getting measures of the environment.

Almost all studies have used psychological tests such as tests of aptitude, of achievement, and of special abilities, while only a few have included medical examinations and data on physical health.

IV

Finally, I was asked "What should be given more emphasis in this area of research?" Obviously, I am not competent to answer that in any kind of comprehensive way. This, I think, is a question that you will be asking yourself as you are planning to conduct or to help others conduct studies of this sort. But I would suggest two emphases which I think might contribute further to the behavioral sciences, and also to greater knowledge which has practical value for teachers and administrators. First, I believe that we still need greater extension of the use of some of the conceptions that have been found helpful in those behavioral sciences which have not yet been widely used in studies of college cultures. For example, there has not been much use, thus far, of information theory as one means of analyzing the interaction that goes on, especially the interactions among faculty members. This conception seems to have relevance and its use might open up further insights. Another case would be use of game theory as one way of examining the data about the relations of students in peer groups and the relations of students and faculty. Better use might be made of perception theory in trying to explain and analyze similar data. I believe that use of value theory has not been carried as far as it might have been. We have done much more with social class theory and perhaps with communication theory. But there are aspects of communication theory, such as the use of the concept of communication networks, that might offer some help in understanding more of the problems of getting unity and loyalty to educational ends in an institution. I am suggesting, in other words, that one important emphasis is to continue what has already been a great development since World War II -- the effort to use sophisticated notions and concepts about human behavior to see how helpful they are in collecting and analyzing data about human behavior on the college campus.

The second thing that I would suggest, so far as the behavioral sciences are concerned, is more of an effort to bring together people from several disciplines, to try to formulate a more comprehensive model that would help to understand the situation in a given institution. We need to work towards a greater integration of different disciplines for this purpose. The Center for the Study of Higher Education here at Berkeley, I understand, is doing a good deal of that in its "eight-college study" by bringing together the sociologists and the psychologists. So, there are some efforts in that direction; I think they are a very healthy sign.

STUDENT CULTURE

Howard S. Becker

Institute for the Study of Human Problems

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In seeking to understand the behavior of college students, social scientists increasingly refer to "student culture." They discover student culture through the use of a variety of research techniques and give meaning to the expression in the context of a variety of sociological, anthropological, and psychological theories. Student culture does not mean the same thing to everyone who uses the expression; indeed, the current agreement that "student culture" is an important variable masks a great deal of disagreement about the character of that variable and the way it is to be discovered empirically.²

We might profitably investigate the various meanings investigators have given to the term student culture, noting both the theoretical and technical sources of variation in their definitions, and the consequences for their research of that variation. I have, however, chosen to take a different path, to talk about one of the possible meanings of student culture and one way of getting at it empirically which my colleagues and I have found useful in studying both a medical school and the undergraduates of a large state university.

¹This paper is based on research carried on under the auspices of Community Studies, Inc., of Kansas City, Missouri, and supported by a grant from the Carnegie Corporation. My colleagues in the research are Blanche Geer and Everett C. Hughes; Marsh Ray participated in the data-collection phase of the study. The statements made about our findings are preliminary; we are now preparing a monograph reporting the findings in detail.

²See, for instance, John H. Bushnell, "Student Culture at Vassar," in Nevitt Sanford, editor, The American College (New York: John Wiley and Sons, Inc., 1962), pp. 489-514; and Burton R. Clark and Martin Trow, "Determinants of College Student Subculture," in Theodore M. Newcomb and Everett K. Wilson, editors, The Study of College Peer Groups: Problems and Prospects for Research (New York: Social Science Research Council, forthcoming).

When we speak of student culture, we refer to a set of understandings shared by students and a set of actions congruent with those understandings. Student culture, on this view, is a shared way of looking at one's world and acting in it. To use other words, it is a set of perspectives on one's situation. This, of course, is one of the possible meanings of culture. In adding the qualifying adjective student to culture, we mean to indicate that the understandings and actions grow up around the student's role as a student -- they are specific to the student role. By focusing on the student role we imply that other roles students have in other areas of their life are not of major importance to their activities as students. That is, we do not expect that the latent identities or roles of students -- such roles as members of a particular social class, for instance -- will have as much to do with student behavior as will factors that are immediately and directly associated with the role of the student.

We may begin with a few basic propositions about student culture so conceived. First, student culture can be viewed as a collective response to chronic and pressing problems, problems which arise when the long-range perspectives of students are confronted by the social environment of the campus. Long-range perspectives are the perspectives which bring a student to the school and tell him what kind of a place it is, what he wants out of life, and how he will get it by going to this school. They look far ahead to the future beyond school; in looking so far, they do not encompass much of the foreground. The immediate circumstances of school are not taken into account in a long-range perspective. When the student attempts to implement his long-range perspective in the immediate circumstances of school, however, he finds that the perspective's detail is insufficient to tell him what to do as problems arise. Therefore, he and his fellows, who share similar problems, devise ways of meeting the problems posed by the confrontation of long-range perspective and situation; they develop solutions to the problem of what is to be done here and now in order to get what they want in the future. These can be called situational perspectives.

In speaking of student problems, I do not mean to imply that these are deep-seated personal problems, but rather mean the term in John Dewey's sense: People have problems when some course of action they have undertaken is blocked, when it is not apparent what they should do next and they must formulate some new line of action.

Problems vary in the extent to which they are immediate, pressing and unsolved. In the medical school we studied, for instance, problems are visible and pressing; students do not know what to do and must develop solutions as they go along. Perspectives and cultures containing solutions to their problems are not already present to be put to work in the situation,

but must be developed anew by each class. The problems are faced and solved collectively.

This is not the case in college, where there is much intense communication between new students and their older fellows. As the new student moves into the college society he faces many problems but finds the cultural guidelines to solution ready at hand. Other students have faced these problems before him and developed perspectives to cope with them; they transmit the solutions to him. It may thus appear that there are no problems and in a sense that is true; almost as quickly as a problem occurs the solution is there to be used. Yet we can still speak of the existence of problems. If the solutions were not there the students would have problems; and thus we can speak of students' situational perspectives and student culture as solutions to student problems.

Second, as I have already implied, the solutions to situational problems which comprise student culture are collective in character. They develop in a process of interaction among people who share the same problems and have an opportunity to interact with one another in the search for the solution to their problems. This specifies another of the conditions necessary for the development of student culture. If students do not in fact have similar problems, there will be no occasion for them to develop common solutions. Each student will solve his own problems in his own way. Similarly, if students even though they share similar problems do not have the opportunity to interact with one another extensively and intensively, they will not be able to engage in the discussion necessary to arrive at a common solution. Each student will find his own solution and go his own way. (Such a situation might be characteristic of a commuter college or a night school.) Solutions to student problems are typically not imposed on the group from outside nor even suggested from the outside; they are developed by the group itself in the course of its interaction.

Finally, given the long-range perspective with which they enter, the situational problems they encounter, and the limits of their knowledge, the situational perspectives students develop can be said to be rational. That is, they constitute some kind of consciously developed solution to the problem at hand and have been deliberately evolved as a solution to that problem. Of course, these solutions may not appear rational from some other viewpoint or from some other time perspective. If one looks ahead twenty years and asks how the student might wish he had solved the problem as he looks back from that vantage point, it may appear that the solution he used at the time was not rational. But, in the situation as he faces it, the solutions and perspectives students evolve have the quality of being oriented toward concrete immediate problems and designed for their solution.

We developed our notions about student culture in the course of our study of a medical school.³ We used the method of participant observation in our study, going with medical students through all of the experiences that comprised their medical education. We did not ourselves examine patients, take examinations, or assist at surgery; but we did accompany groups of students as they went through these experiences. We found that the long-range perspective of medical students identifies medical school as the place in which one learns what one needs to know in order to practice medicine and help people in trouble. As a corollary, students feel that it is necessary, obviously, to successfully finish the four years of medical school so that one can be a doctor, practice medicine and help people.

The perspectives that constituted student culture in medical school developed when students holding this long-range perspective entered the environment of the school and found that they would have to make their aims more specific and more related to the immediate situation if they were to succeed in achieving them. Specifically, first-year students felt that, because they were going to help people with all kinds of diseases, they needed to learn everything there was to be learned about medicine and its allied sciences. But they quickly found that the traditional warning given them by their teachers was true: they could not learn everything in the time they had. They found that they must select from among all the facts available to be learned those which were most likely to be of some help in achieving their aims. This proved to be an impossible task, because the students did not know which facts were likely to be helpful in the conditions of medical practice. Students further discovered that using such a criterion to guide their efforts in learning might lead to low marks on examinations. They feared that enough low grades would mean the end of their medical education; they would never have the chance to practice medicine. As students interacted in the anatomy laboratories, the classrooms and in their medical fraternity houses, they discussed the problem of what they should learn and finally arrived at a criterion, eventually accepted by the class: they agreed that they must study those things the faculty was likely to examine them on, whether they could see their relevance for medical practice or not. In other words, they gave up, for the time being, an orientation toward the future situation of actual medical practice and concentrated on doing what appeared to be necessary to get through school.

³The study is reported in Howard S. Becker, Blanche Geer, Everett C. Hughes and Anselm L. Strauss, Boys in White: Student Culture in Medical School (Chicago: University of Chicago Press, 1961). An extended discussion of the concepts of perspective and student culture can be found on pp. 33-43.

In the clinical years of medical school, students' work was much more closely related to clinical medical practice. They examined patients, made diagnoses and assisted in various treatment activities. At first glance it seems that they would now be able to return to the long-range perspective they had entered with. But they did not. Students found that the necessity of coping with the problems presented by their immediate environment still occupied them exclusively. The problems of the clinical years differed, of course, from those of the pre-clinical years. Students were now concerned with being allowed to exercise medical responsibility, getting the chance to acquire clinical experience, and learning to cooperate with other students in order to help each other get through school. The problem of learning just what the faculty wanted so that one could make a good impression on them remained as difficult as ever.

Faced with the problems of the clinical years, students developed a set of perspectives that specified how they were to view their situation as students and how they were to act in the situation. To take a dramatic instance, students agreed that they ought to cooperate with one another in restricting the amount of work they did, when that work seemed to them not directly relevant to their medical education. Thus, for instance, they limited the number of case reports on patients they turned in, feeling that making out these reports did not add in any way to their fund of medical knowledge.

We discovered that student culture -- the perspectives students develop on their problems as students -- had noticeable effects on the way they performed in school and on the way they viewed their futures in medicine. For instance, the major effect of student culture is clearly to give students an alternative view to that offered by the faculty as to how they should act in medical school. It provides the basis for deviation from faculty norms of student behavior. In addition, the perspectives of student culture influence the way students categorize and evaluate kinds of patients, their views of the advantages and disadvantages of various kinds of internships, and their attitude toward careers in different specialties.

We then applied our ideas about student culture to a study of the undergraduates of a large state university, the University of Kansas. The University of Kansas was founded about the time of the Civil War and has a distinguished history. It has long been regarded by most residents of Kansas and surrounding states as the best and most academically oriented of the universities in the area. Its student body now numbers about 10,000, of whom between six and seven thousand are undergraduates. It is organized much like most state universities having, as well as a college of liberal arts, a school of business, a school of engineering, a school of fine

arts, a school of journalism, and a school of education. Its students are housed in the usual variety of places: fraternities, sororities, dormitories, co-operatives, and rooming houses and apartments. The University also possesses a somewhat unique residential unit, the scholarship hall. (Room in scholarship halls is available to students with high grades at a reduced rate. In return for the reduction in rates, residents of scholarship halls cooperatively do the maintenance work and cooking for the hall.) Students consider the fraternity-sorority system among the strongest in the nation and evidence in favor of their view is found in the fact that many of the chapters on the campus have won awards as outstanding chapters in the country. Finally, the majority of students come from the State of Kansas, although ten per cent come from out of state and several hundred from foreign countries.

We want to avoid the fallacy of identifying the University solely with its professional personnel, its administrators and faculty. While these categories of people are an important part of any university, and no university would be a university without them, they are not, either in the eyes of the students or in any conception of the university as a functioning social organization, all there is to a university. We include in our conception of a university, as do the students, the whole connected web of institutions with which students come in contact once they enter college. The university includes, in addition to its academic components, the network of living groups, both those maintained by the university and those maintained by the students or by outsiders; the large number of varied student organizations; the local business establishments, insofar as they play a role in student life; the various drug stores, bowling alleys, and beer joints in which students find "unofficial" recreation; and so on. We tend not to think of these organizations as part of the university because they have not been purposely created by university personnel for the use of students; indeed, in many cases, the organizations have been created by students, sometimes without university sanction. Nevertheless, the university as the student experiences it is a community and all the institutions in the community are important to him and therefore to us if we would understand him.

Since the university is so much more complex an organization than the medical school, we might with justice expect to find a more varied set of perspectives among its students than we found in the student body of the medical school -- several student cultures rather than one homogeneous culture. Medical school is monolithic in the face it presents to students. All students take the same courses, deal with the same faculty, and in general face the same problems. As might be expected, student culture is homogeneous. All students believe and act in very much the same way. On the other hand, we know that college is not so monolithic. Students

study different things, deal with different faculty members, and are oriented to different futures. In these circumstances, we might expect that student culture would not be homogeneous. We might find large variations in the way students think about college and their experience in it and in the way they act while they are in college. We might, in short, find many student cultures rather than one homogeneous student culture.

Whether one sees one student culture or many on a campus is partly a matter of the researcher's choice. One can concentrate on those things in which students are alike or on those in which they differ. Insofar as we are concerned with the problems and perspectives directly related to the role of students, students seem to us to be very much alike. We have found it more useful to think and talk about one student culture than to think about many student cultures. Analyses of campus life that discover several differing subcultures among the students ordinarily trace their origins to differences in the students' pasts -- usually in their social class backgrounds -- or to differences in their futures, in the kinds of careers they envision and are preparing themselves for. We have concentrated much more on the college experience itself which, in a large sense, is very much the same for all students. Consequently, those aspects of college life related to differences in social class background or to differences in prospective careers seem less important to us than those directly related to the college environment and the problems it poses.

This is not to say that students do not differ either in their backgrounds or in their futures. Rather it is to say that those differences, interesting as they are, seem to us to have somewhat less effect on the way students act and think while in school than they are popularly supposed to have. There are variations in how college students look at their college experience and act while they are in college, but the variations are variations on a set of common themes, related to situational variations in the college environment. We have devoted our attention more to what is common than to what is different.

We used the method of participant observation again in studying Kansas undergraduates, although we were forced to elaborate our techniques because the undergraduate college is, after all, larger than a medical school. We observed students in all the kinds of living groups present on the campus, participated with them in the many activities that make up the extra-curricular life of the campus, attended classes, and so on. We made an effort to see something of each of the kinds of groups that existed on the campus and each of the kinds of activities that dominated campus life. We also interviewed a large proportion of student leaders on campus intensively and investigated their activities thoroughly.

We were forced to elaborate our theories as well as our methods. The data we collected required us to add to the notions of long-range and situational perspectives the concept of an institutional perspective. The institutional perspective, like the situational, is tied to a specific social setting, a specific institutional complex -- in this case, the university. But the university is a large and varied institution and the student may find himself in a great variety of specific situations as he moves through it. We speak of situational perspectives only with reference to the ideas and actions developed within specific situations and refer to institutional perspectives when we discuss the more generalized notions and patterns of behavior students share in reference to the university. Institutional perspectives are held by all or almost all students who participate in the life of the university; situational perspectives are held only by those who participate in the specific situation under investigation. We expect all students to share the same institutional perspectives, insofar as the university presents some similar set of general problems to all students; we expect to find different kinds of students holding different situational perspectives, depending on their position in the structure of the university and the situations this exposes them to. The situational perspectives, however, do not represent totally different ways of approaching students' problems. They are, rather, different phrasings of the same general point of view.

When we interviewed and observed pre-freshmen who came to the University during the summer for orientation, we discovered that their long-range perspectives were very hazy. They thought of the University of Kansas as a very large place and were not sure how they would manage the problems it posed. But they were clear about what those problems would be. They knew, of course, that there would be courses, examinations and grades, so that they had a sense that academic achievement would be important. But just what would it mean to be a student, in what dimensions one's success or failure would be measured -- these questions as yet had no answers.

As they moved through the freshman year, students sharpened their idea of the meaning of the college years. They defined college as a place in which one demonstrates that he has become a mature adult. They decided that now, at last, they were entering adult life. College was the real thing, the big time. Up to now everything had been "kid stuff," having no lasting consequences for one's future. But now they feel that they are embarking on their careers as adults and that what they do in college will have lasting consequences for the rest of their lives. They feel that the main thing they must do while in college is to demonstrate, both to themselves and to others, that they have grown up successfully, that they are no longer kids but are now mature adults. They believe that they

can demonstrate their maturity by being successful while they are in college. But they still do not know the specific, concrete indices which spell success on campus. The question they must answer is: How can I do well while I am here and demonstrate that I am mature?

The answers to these questions are provided for them by the organization of the campus. Students develop institutional perspectives specifying the meaning of doing well by referring to three areas of college life. There is the familiar area of academic work -- classes, courses, grades, and degrees; that of making friends -- including learning to manage one's relations with members of one's own sex as well as with those of the opposite sex; and an area which is harder to give a name to but which encompasses all the things ordinarily brought together under the label of "activities" -- an area in which the effort is to learn how to influence people and organizations to do what you want them to. The Kansas campus, and most college campuses, are so organized that the three areas of academic work, making friends, and activities constitute the major foci of student interest. Students believe that if they do well in all of them they will demonstrate that they have successfully grown up and will be able to think well of themselves as well as be thought well of by others.

Students develop perspectives on their college experience in the three areas I mentioned. The perspectives specify the goals to be attained, and the actions to be taken in pursuit of the goals. In the area of academic achievement, goals are set by the faculty. Faculty members design courses, give examinations, require term papers and eventually grade students on the work done for their courses. The faculty sets standards and rewards students who meet them with good grades and, for those who are interested, help toward graduate or professional schools and professional careers. (The goal of entering a graduate or professional school is held by only a minority of students so the ability of the faculty to give or withhold help in this area does not count for as much in a student's life as does their ability to give or withhold good grades.)

In short, the student perspective on what constitutes achievement in academic work is that one demonstrates one's worth as a student by getting good or at least acceptable grades. Most students, except those whose abilities are far outdistanced by the demands of university work, believe that anyone can get B's or C's if he will buckle down and do the work. If one does not at least get passing grades he is behaving irresponsibly and therefore immaturity, much as a middle class adult who could not keep a steady job and earn sufficient money to support a family would be considered to be irresponsible and immature.

There are, of course, situational variations among students in this perspective. Some students feel they must get very high grades in order to demonstrate their maturity. Other students are content to get grades that will allow them to stay in school. But students with varying orientations agree that grades are the mark of academic achievement. Many students, even those who regard grade-getting as somewhat beneath them, feel that grades are in fact a true measure of one's personal worth and that if one cannot get good grades he has failed in growing up.

Three typical student activities are common expressions of the perspective that puts heavy emphasis on grades. One of these is the constant calculation of grade point averages engaged in by students. Students can be observed, as the semester progresses, calculating and recalculating the grade point average they can expect, given their present status in each of their courses, and making decisions about the further distribution of their academic effort on the basis of that calculation. A second activity expressing what might be called the "grade point average perspective" is the constant attempt made by many students (and very often successfully) to manipulate faculty members in order to increase their grades. Student attempts to influence grades range from simple efforts to become friendly with the teacher to lengthy (and sometimes collective) campaigns to force the teacher to state exactly on what standards he will base his grade so that the student can organize his efforts accordingly. A final expression of the grade point average perspective can be found in the training given younger students by older students in the art of passing courses and getting high grades. Training can be formal or informal, and reaches its peak in the organized study halls characteristic of fraternities and sororities.

The beliefs and activities that make up the grade point average perspective often take the form of an attempt to give the teacher what one thinks he wants in order to get a good grade. Some students feel a considerable disparity between what they might be able to learn or what they might want to learn and what they are required to learn in order to get a good grade. Other students, however, believe that what the faculty wants them to learn must of necessity be what is worth learning; after all, who should know better than the faculty what is important and worth knowing? Some playful and bright students turn the requirements of the faculty into a game, trying to devise solutions to the problems posed by assignments which will both satisfy faculty demands and amuse or instruct the student simultaneously.

Faculty members are often irritated by students' emphasis on grades rather than on the "real content" of a course. They should remember that they themselves have made the grade important by giving it, by

putting so much emphasis on it and by using it as a measure of student worth in other connections. We should also note that student emphasis on grades, though it is based in the first place on the view that the grade is in itself an expression of the student's worth and maturity, is also determined by the fact that grades constitute a major requirement for participation in other campus activities. If one does not maintain a passing grade point average he will not remain a member of the campus society for very long. Furthermore, grades are both formally and informally required for membership, and particularly office-holding, in most campus organizations. The University itself requires a minimum grade point average of all officers of major organizations, and many of these organizations informally require much higher averages than the University minimum, on the premise that a student who cannot achieve high grades is unable to organize his time effectively and therefore would be unable to carry out the duties of the office successfully. Finally, it is even the case that grades affect one's social life, both directly and indirectly. Students who do not maintain a sufficient grade point average are not able to join fraternities and sororities, which are often supposed to have something of a monopoly on the most desirable members of the opposite sex.

One does well in the area of activities by getting and holding office in campus organizations and performing the tasks associated with office successfully, thereby learning to handle and manipulate people and organizations. Success in organizational activity is another of the signs students use to judge their own maturity. The campus, from one point of view, is made up of a vast network of organizations, each with its own set of officers. The various living groups each have a set of officers who deal with their internal government. One may be president of a fraternity, dormitory, or scholarship hall, or hold many of the lesser offices available and requiring to be filled in his residential group. One may participate in and perhaps be an officer of one or more of the many departmental and subject-matter clubs and honorary fraternities. One can be involved in campus politics or in what might be called campus "philanthropic" organizations, such as the organization that runs the affairs of the Student Union. A very large proportion of students have at least one membership in some organization outside the living group they belong to, and many hold more than one membership. A very sizable proportion of students have held, by the time they graduate, one or more major offices in some campus organization. Success and achievement in activities through office-holding is something that practically all students are interested in and strive for.

Several points deserve mention in connection with campus activities. Some groups on campus are more successful than others in achieving the

goals specified in the activities perspective, the perspective which says it is important to gain recognition by participation in and office-holding in campus organizations. In particular, Greek-letter organizations tend to get more than their share of the campus jobs considered most important (though independent groups are also well represented, but typically in the less prestigious organizations). The reason for this does not lie, as some might suspect, in some kind of discrimination practiced by Greeks against independents. Rather it can be explained by the fact that one can become a leader only if he starts working in an organization very early in his campus career and works his way up through the ranks, accumulating experience and seniority as he goes. The Greek-letter organizations encourage their members to participate in activities early and make informed suggestions as to which ones will prove to be most interesting and valuable. Although the achievement of top offices requires a good deal of ability on the part of the student (he must be able to perform adequately in the positions he holds), individual ability is not the whole story. Very frequently, the top jobs are parceled out in a political process involving deals between major groups on the campus, and very able people may have to be passed over for the top jobs because it is not their house's turn to have a leader.

Students do not think of their offices in student organizations as "kid stuff" or child's play. They see activities as a tremendously important part of their education in which they can both prove their maturity and get experience unobtainable anywhere else, experience in running large organizations and manipulating groups of people. They may, for instance, have the experience of administering a budget of forty or fifty thousand dollars a year. They may, as officers of a living group, have the responsibility of trying to reconcile the necessity for humane treatment of an individual's problem with the organization's need for stability and the maintenance of a reputation -- as, for instance, when the president of a dormitory or fraternity discovers that one of his fellows is a kleptomaniac or alcoholic. They may find themselves in open conflict with university personnel over major items of university policy, as in the recent nationwide series of incidents over inviting outside speakers to appear under university auspices.⁴ Students feel that their experience in student organizations gives them excellent training in handling responsibility, dealing with ethical dilemmas, and in general in meeting problems they will face as adults. (One observer of American industry notes that the most

⁴For a lengthy account of one conflict between students and administrators over university policy, see David Horowitz, Student (New York: Ballantine Books, 1962).

successful industrial executives have had the experience of being campus "big wheels," suggesting that the students' perspective is accurate.)⁵

A final area in which the perspectives of student culture operate is the area of sociable interaction -- making friends, getting along with members of the opposite sex.⁶ Students, for instance, consider it very important to be able to get along with other members of one's own sex, to have friends. The problems of making friends vary according to where one lives, how bright one is, and what subjects one is studying. Students who live in fraternities will have as ready-made friends all the other members of their fraternity, although these friendships may be somewhat superficial and they may still have to look for more intimate friends. Independent students are not provided with such a ready-made group of friends, but generally manage to find kindred souls in their living groups. One exception to this statement can be found among freshman women and, to some extent, among independent women generally. They are more apt than male students to feel that association with "inferior" girls may be dangerous to their campus aspirations and are more guarded in making close friends with other women.

Students also have perspectives which define the criteria of success and the means by which success is to be achieved in relations with the opposite sex, in dating. The question here is: Who among my fellow students will be a "good date," a person with whom I can prove my maturity by sustaining a properly adult heterosexual relationship, and how can I get my share of "good dates"? The answers lie in the way students rank living groups and in their conceptions of the proper way for heterosexual relationships to be established. Students share a conventional system of rating living groups and the students who belong to them. This rating is based on many things, including achievement in activities and academic work, but also including looks and "sharpness" on a date. That is, even though groups may be rated on other standards, good looks, sexual desirability, and dating sharpness are in general supposed by students to be related to the rating made on these other bases. For instance,

⁵See Melville Dalton, Men Who Manage: Fusions of Feeling and Theory in Administration (New York: John Wiley and Sons, Inc., 1959), pp. 163-66.

⁶I deal here only with patterns of sociable interaction, not overt sexual activity. A comprehensive study of sexual behavior patterns in college is reported by Winston Ehrmann in Premarital Dating Behavior (New York: Henry Holt and Co., 1960).

students typically believe, though there are many exceptions, that the living groups rated highest by everyone -- "top" fraternities and sororities -- produce the best dates. The girls are thought to be the best looking, the men the sharpest on campus.

Students share certain notions about the proper way to meet a member of the opposite sex. If one has not been formally introduced or has not met another person in an appropriate setting, it is considered impossible for a man to call a girl for a date. This means, for instance, that only those students who actually have some formal contact with members of the top sororities can ask these girls for a date. Campus interaction is so structured that it is relatively unlikely for certain groups of students to meet the members of the top sororities. Those who are most likely to meet them are the members of the top fraternities, with whom the sororities have traditional and long-standing relationships. An independent student who lives in a rooming house is relatively unlikely to meet the members of the best sororities, and consequently is prevented by the structure of campus interaction from achieving the top rewards in the dating system. (This overstates the case somewhat and is most true for formal social events: exchange dinners and dances and similar events. It is also possible for men and women to meet in class -- though most men from less prestigious groups think it very unlikely that girls from prestigious groups will encourage advances made in class -- or in activities, where the intimacy of working together may be the prelude to a dating relationship.)

This perspective affects students' efforts in many ways. Living groups attempt to improve their competitive position, trying to get a reputation for being sharper and more desirable. In part, they attempt to improve their position by excelling in other areas of activity we have already mentioned: organizations and academic work. A fraternity, for instance, will attempt to raise its grade point average, partly in hopes of being rated more highly on campus and thus gaining access to more desirable girls.

The three areas I have discussed and the perspectives of student culture on them account for a great deal of what students experience and do while they are in college. The interesting question immediately arises as to how typical the campus we studied is of American colleges generally. Will student culture be different, for instance, on a much smaller campus than the relatively large one we studied? Will it be different on those campuses where national politics seems to assume a great deal of importance? We can raise many questions of this order, speculating about the variables that might affect the content of student culture on different kinds of campuses. It is hard to say anything definite

about this, because few studies have been done of colleges looking for answers to questions of this kind.

My guess is that the problems of growing up and achieving maturity in a way that can be demonstrated to oneself and others are much the same for most college youth, but that the terms in which they can be solved and in which it appears proper to solve them -- the institutional perspectives -- vary from campus to campus. Thus, a much smaller college might lack the vast network of organizations in which one can acquire the ability to manage people and groups and thus demonstrate maturity in that area of life. Such a lack is often said to be compensated for by the more frequent and more intimate interaction between students so that what is lost in activities is gained in the area of personal relationships. It is often thought, for instance, that the problem of dating is less severe in a smaller institution because of the intimacy of personal relationships. This may be true, yet it is also possible that in the smaller college it is actually more difficult to achieve satisfactory dating relationships. This might occur because the student in the smaller college is not thrown into contact with members of the opposite sex through participation in a network of activities and organizations. Because of the lack of formal groups in which first meetings with members of the opposite sex can take place, male students might never feel well enough acquainted with many of the girls on campus to ask them for a date.

I have concentrated on those matters about which students in general exhibit a great deal of consensus. This does not mean, to repeat a point made earlier, that students do not differ among themselves in many ways. They differ in their plans for the future: some, for instance, will go on to graduate work while others will immediately begin a business. Students vary in their intellectual orientations, some being greatly influenced by their professors and having developed an intense taste for the intellectual life while others have not been so influenced. All these differences may influence the choice of one's intimates on a campus, but they do not affect the basic notion that it is important to do well in academic work, organization activity, and relations of friendship and dating. Students of all kinds are equally concerned with such matters, believing them to be the areas in which demonstrated competence will attest one's successful achievement of maturity. It is in this sense that we may think of the campus as having one student culture, a culture which dominates student thinking and influences the direction of their activity while in school.

STUDENT STRESS

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Frederick Binder, President of Hartwood College in New York, wrote an article in the July, 1962 issue of the Educational Record entitled "The Awareness of Self." He comments on the intensive analysis to which the American college student has been subjected. The student is bombarded and besieged by diligent investigators exploring his adjustment rate. Binder implies that the new cult of personality is a fad, and asks for, as I read it, a return to basic and enduring faith in education. We behavioral scientists are getting too large a slice of the foundation pie. And for all this, he notes, we produce only more and more questions and precious few pragmatic answers.

My apologies, then, to President Binder and to those of you who share his views, for I will raise more issues this afternoon than I will settle. My major defense in proceeding as I have planned lies in Ralph Tyler's remarks last night about the effect of the last thirty years' research in altering our image of what a college does for and to its students. The point is so central that I would like to add some further comments before going on to my unanswered questions.

A major effect of behavioral science research, and I think this includes, in an important way, psychoanalysis as well, on education has been to shift the nature of the questions that are asked about the students' emotional and academic development in college. There was a time when it was enough to inquire about the student's IQ, the quality of his character, the cleanliness of his room, and of course his grade point average. A different concept of the mind and of the student is implied when one asks such questions as how the student psychologically integrates the new experience of college. Does a college education insure the student free, mature use of his intellect? What processes in the student, interacting with the college milieu, promote his creative, continued emotional growth? The uses to which the student puts his education are thought of differently than before. A categorization of discrete traits has given way to a searching out of gross and subtle discrepancies between thought and act. This applies equally to the student and to the intended

consequences of the curriculum and of the college experience itself. Notions of cause have become conditional and are sought in dynamic processes located within the individual or between individuals. Not only are the questions changed, but the evidence that we accept and the inferences that we draw are profoundly altered. Our theory leads to a restless curiosity, not to closure. No theory should blind or restrict our vision if it is to be really useful. The theory should not be used as a psychological divining rod which points to the bad mother, the distant father, the angry, frustrated teacher, etc., and leave unanswered what the student does to cope with mother, father, or teacher.

This theory implies a method of procedure, a perspective, which is also clinical and directed openly toward intervention. There is a more than superficial similarity, I think, between the psychoanalyst's relation to his patient and the research worker's position with respect to the college which is the object of his study. Permit me to explain in a few words, if I can, what I think this similarity may be. Our patients are asked to tell us, in honest detail, what happened before we turn to tentative speculation on why it happened as it did. We constantly assess the meaning, to the patient, of our interventions, our questions, and our insights. The resistances of the patient are respected and are carefully noted. They are also thoroughly investigated. The patient and the physician are both committed to change, but accept, as the major legitimate agent for change, insight and an increase in self-awareness. Ideally, the number of cues to which the patient may respond is multiplied. His restrictions on both perception and response are minimized and are subjected eventually to an altered and increased conscious control. These same points are highly relevant for the participant investigator of an institution like a college. Such a theory, such a procedure, does not provide a comfortable climate of opinion for the individual who rests with easy answers, or has fixed notions of cause and effect.

With this extended preface said, I will proceed with a discussion of several aspects of our current work at M. I. T., which appears to me to have more general relevance to higher education, or to the problems of research in higher education.

As I warned you, I will begin with questions and end with questions. What kinds of information about the college and about the college student does the administrator need in order to understand the educational impact of his school, or the educability of his students? How does the administrator achieve a maximally honest and realistic understanding of his institution? Students, and faculty as well, have a wide variety of expectations, and are heir to many, many disappointments that they hold in private, precisely because they are so close to what is felt as meaningful

and central to them. Exposure of these private feelings, these private expectations and disappointments, is experienced often as a shameful, feared event, resulting in some loss of self-esteem. There are relatively few research instruments which tap this aspect of life experience. This is not surprising, since there are many obstacles and resistances which serve as a rational curtain to hide this aspect of life. As we see in psychoanalysis, secrets are kept from others and are kept from oneself for intelligible cause. A careful and systematic investigation of just these reasons for holding onto secrets and maintaining private thoughts reveals much about the structure and the function of the individual's methods for both defense and adaptation. This is not to imply that it is only from secrets or from private thoughts that we can learn such things, but to a significant degree this is so. It is obvious to you that prying into secrets is much more than just a research problem. We are faced with an ethical question of whether we have the right to pry, and if so, under what safeguards for the student's privacy. But perhaps we can discuss this in more detail later this afternoon.

We have considerable understanding of why a given feeling or thought is sufficiently charged to become subject to repression, to denial. This inner aspect of one's life may be held a secret at one time and at one place, and be made decidedly public at another time and place. There are other factors related to the psycho-social development of the individual which affect his personal definition of what is to be classified as secret, what is felt as meaningful, what is held as private. The vulnerability of the inner self to exposure will vary with the setting and with the phase of the individual's development. What has just been said is not to imply that breaking secrets is an end or goal in itself. The point is rather that knowledge of this area of experience is necessary if we are to understand the way that students integrate their new life at college with their past, the extent to which the college prepares them for some future, often quite unanticipated, role in later life. We also need knowledge of these secrets in order to understand the educational institution in depth -- or this, at least, is my position. The net effect of this added knowledge is to enlarge our perceptual field and enable us to respond to far more cues from the environment when we consider the students' life on campus.

I will turn now to a summary of some of the comments taken from interviews conducted on a random sample of students in the junior class and the freshman class at M. I. T. These interviews were conducted as parts of a larger study and survey. Among the many issues that were raised by the students in these interviews, the following will give some feeling for the range and depth of student concerns: loneliness, the poor grade on the first quiz as the first experience of academic failure, changes

in time sense and time perspective associated with the relatively inflexible institutionalized time definition, and the complaint of coldness in the institution. From this description of student responses, I will try to suggest some of the ways that the educational experience expands or contracts the life space of the student and affects his perceptual field. Students differentially respond to educational stimuli. It is obvious that this is a function of what the student brings with him to school as well as the reality of the school itself.

In one of the interviews, a very bright and able engineer referred to the "barren sweep along Main Street. No cars, no people on weekends. It's a lonely place." Then he spoke of the way that several of his friends tried to bring girls back on campus, not so much for sexual acting out but to make a home there. The barren sweep of the Main Street was contrasted with the initial impact that he felt when confronted with three hundred strange faces in a lecture hall. He felt lonely and isolated when handed back his first physics quiz as a freshman, ten points below the class average, his lowest grade to date. It was only toward the end of the freshman year that he realized that being an M. I. T. student brought him some respect from "outsiders," and that the notion of being a member of an elite began to develop and in some measure compensated for the isolation. He said it was like going through hell and surviving, which leads to a sense of pride and mastery.

This complaint of coldness came up in a number of contexts, but from our interview material it was clear that it often served a defensive function and appeared to be a projection of the student's sense of worthlessness and helplessness which was secondary to an almost normal depressive reaction associated with the major stress and shift involved in coming to school. There are other observations that come from the interviews that throw more light on this sense of loneliness and this complaint of coldness. All of these students are in an environment in which grades have a special link to the way in which they, the students, validate their own self-esteem. A second point, of equal pertinence, would seem to be that the education at M. I. T. is linked with the career that will be followed for the rest of the students' lives, in rather marked contrast to the liberal arts curriculum. A low grade in English at Harvard does not mean that the student will do poorly in business, but a failing grade in Electrical Engineering at M. I. T. does affect his career. At least, this is how the student sees it, and this again reinforces the acuteness with which a student will react to the status system of grades.

It is much too soon to say whether the environment is in fact cold and drab. My own impression is that it is decidedly not so. But if this is how it is perceived, it will reinforce an inner sense of loneliness and depression and isolation. Several students commented that if the

environment were otherwise -- warm, friendly, etc. -- it would serve as a distraction.

Another common theme in these interviews was that the physical environment of the institution was ubiquitous; that one simply cannot escape the atmosphere. The discussion of this point often took on a Kafka-like quality. In association with this, students talked of the need to find a plot of ground that was their own, that they could return to. And so far, from our material, we can see a number of informal ways in which students develop a second home, hew a small and secure niche in this granite wall. A particular professor maintains a lab open to all freshmen. They are free to come, work with his equipment. He talks with them at length, often has them to his home on weekends. Another professor was conducting some nutrition research this fall, while our department was involved in interviewing these students. We found that the freshmen who agreed to take part in the nutrition project differed from those who declined this offer, in that the former were lonely and knew it, and saw the experiment as a chance to have friends and conversation at meal-time. They looked forward to the prospect of communicating with the dieticians, and were willing to put up with the indignity of feces collection to achieve this end.

Classes, dormitories, Commons meals were not considered second homes and usually do not serve this function at the Institute at present. Frequently we heard comments like "One gets pretty sick and tired of one's own four walls." It would be interesting to speculate on the similarity of these comments to the experience that comes from the isolation experiments, or the constant environment experiments, where boredom becomes a significant factor and leads to ego depletion. It also means that there is a real possibility that the students' description of the environment contained a romanticized overevaluation and idolization of bull sessions, as well as overly romanticized negative comments about the meals.

Students who worked in the equivalent of the Student Union often found a second home there. The student head of this group commented that he would often have to send the freshmen back to their rooms at one o'clock in the morning, in order for them to get some work done, and he had the persistent feeling that the camaraderie and the warmth kept them from going home. They didn't want to return to their rooms and face their loneliness.

A significant point came up in our discussions with students, which was unanticipated. This concerned the student's time sense, both implicit and explicit, and how it relates to the M. I. T. time perspective, where there are demands for a specific, circumscribed orientation to

time. The students characterize this attitude of M. I. T. as "Young Man, Be Quick. Do it in a hurry. Don't dilly dally." From our preliminary data, it appears that the individual's sense of time is intimately related to his own self image, to his own psycho-social identity, and is further a function of certain developments of the ego during late adolescence -- in which, for example, there is a gradual giving up of the infantile position of "I want what I want, when I want it." There is an increasing ability to delay gratification in the service of some eventual mastery. Play and work take on new meanings, a new significance. This issue of the institutionalized concept of time sense and time perspective is one that requires far more systematic and thorough exploration. We plan further analysis of the psychodynamic significance of reality sense, reality perception, and time sense, on the one hand, and the specific demands made by the environment, the specific scheduling requirements that are inherent in the academic life at M. I. T.

In response to this sense of pressure for producing in a hurry, the students often brought up comments that threw some light on their perception of the institution, as monolithic, unified, inexorable. It appears from our material that the most striking example of this is the large number of tasks that are required of students to be completed at essentially the same time. An engineering student, for example, likes to take "doing" courses and may find himself required to spend considerable time on theoretical courses. A number of other examples of this issue, of the homogeneous demand of the environment, would be the common freshman quiz or the time pressure for homework and laboratory reports. The presence of one status system, i. e. marks, allows a limited number of "outs" or alternatives and leads, for many students, to the development of a hollow feeling when they find that they don't have what they feel they ought to have, i. e., a high grade average. This early attitude of a granite perception of the school breaks down when the students come to know their instructors or get involved in some exciting educational enterprise. This characteristically occurs in the laboratory.

Our current psychoanalytic notions of ego adaptation are central to the thinking and the work that I will be reviewing. What is pertinent for our discussion today is that our preliminary evidence suggests that an educational institution may put a premium on specific adaptive patterns and a penalty on others. This brings up a research and administrative query: How do "we" (and who is "we") go about collecting the data on students, on faculty, and on the institution that relates to the ego adaptation? You can now see the relevance of my opening comments on secret, private experience. There is a further query: What are the significant differences between the psychological and the administrative inferences which can be drawn from such data? I can only suggest answers and hope

that they can be discussed in more detail in groups later today. The difference between the way the psychotherapist or the psychoanalyst intervenes and the administrative intervention is that we, as patient and doctor, are both involved in a maximum sharing of data, that the patient gives his consent and is a party to the enterprise. Nothing is done to him without his having full opportunity to question, to interrogate, and to examine. It is not part of the administrator's contract with his students to share all data. His role, understandably, requires unilateral action on occasion.

Let me describe briefly now something of our current study at M. I. T. This is a modest project supported by the Institute itself and, at least so far, receives no outside funds. We have not been charged with answering specific questions about courses, curricula, or drop-outs, but are hopefully going to be in a position within a year, two years, or five years of adding to the community's understanding of itself, of how it operates and of its effect on the inner life of the participants.

A pilot study undertaken during the past year at M. I. T. will be described in order to clarify the way in which we have attempted to develop meaningful notions about the inner life of the student, the external press of the environment, and the interaction between these two. Two aspects of the study will be presented to illustrate this issue: one, the Student Movement Study, which has two phases to it, and the interviews which have already been referred to. These two separate projects will be compared, by looking at the data which is gathered in each, the tests of significance which can be reasonably applied to these data, the data analysis which is appropriate, and the inferences which can be drawn from each study. Also, some of the ways in which each project complements the other in providing a different level of information about the institution and the student will be suggested.

The Student Movement Study took one entire class of 900 students and operationally defined a number of groups or cohorts within that larger population. The major field of interest, the course, the grade average, and the movement in and out of one course, or in and out of the Institute, are the criteria which are used for inclusion of students in particular groups. The shifts from one group to another are then plotted over time. This gives us an over-view of the way in which students move into and out of the Institute, and the various routes by which they pass through it. To this basic data, we have added a number of available demographic and psychological variables, which can be correlated with each group. This is largely an empirical study, which permits us some preliminary picture of whether physicists who do well academically differ from civil engineers who also do well, or whether physicists who do

poorly differ from academically average architects, etc. Some of the variables that we have access to are father's occupation, mother's occupation, educational level of parents, living place of student, home location, financial assistance, high school performance, scores on entrance examinations.

The population for this pilot study is the current junior class at M. I. T. Fortunately, all members of this group were given the Minnesota Multiphasic Personality Inventory and the Meyer-Briggs type indicator during the first week of their freshman year by the Educational Testing Service. This has given us a series of psychological variables. The true meaning of these variables has yet to be established. The Omnibus Personality Inventory developed here at the Center for Study of Higher Education has been given to this past year's freshman class and proves to be a more useful and relevant instrument for our purposes than the other tests just referred to.

The first step in our data analysis involved calculating the statistical means for all of the variables for each group and comparing them against the means for the total population. We also then can compare the means in one group with those in another. Other statistical tests that will be used include the D-Square Test and a discriminate analysis, which, in effect, involves the development of regression formulae to discriminate maximally between two groups by adjusting the regression coefficient. Factor analysis and P-Analysis are also to be done. We are dealing here potentially with 500 groups and better than 40 variables. The 7090 Computer can deal with this number of variables and can also perform these statistical tests of significance.

From this essentially empirical and epidemiological study, we should have a clearer picture of the factors which characterize these groups. We are interested in those variables which will maximally discriminate one group from another and give us a base to begin to understand the meaningful differences between the various groups. This will serve as a vantage point from which we can begin to look for those differences that relate to ego function.

There are certain assumptions that underlie this study, among them the notion that each course (such as civil engineering, mechanical engineering, architecture, physics, electrical engineering, industrial management and humanities, to list representative examples) requires separate cognitive tasks, separate ways of conceptualizing experience, and, to some extent, can be considered as a sub-culture of the larger institutional culture. Our further assumption is that each course has its own finite range of permissible adaptive responses.

The interview part of this study is designed to give us information on the students' ego function and structure, and eventually to provide us with the psychological information necessary to determine whether these groups differ in their characteristic patterns of ego adaptation, in their perceptions of the total educational experience and in their perceptions of the tasks confronting them in a given course.

We have had two one-hour taped interviews with randomly-selected students, including to date 30 from the junior class and 15 from the freshman class. These have been essentially unstructured interviews, except that the interviewer had thirteen areas of psychological functioning which he attempted to cover during the interview. These areas included some appraisal of the student's ego function, the quality and characteristics of his adaptation to M. I. T., his specific ego defenses, the nature of his object relationships, etc. This is an hypothesis-refinement, hypothesis-development inquiry, and less empirical than the Student Movement Study. Statistical tests of significance obviously are not appropriate to this type of data. Here we will be using reliability tests, with independent blind analysis and scoring or rating of the interviews. The interviews will be indexed by area, and we are currently in the process of developing a coding protocol by which at least some of this information can be transferred to IBM cards to allow retrieval of this information and to enable us to correlate it, where possible, with data from the Student Movement Study.

One example of the information which can be derived from these interviews will be presented, together with the inferences which are drawn from such data. I hope to illuminate the internal forces that influence the student's perception of his academic tasks. One student interviewed saw college as a challenge and a game to be played and won. He was doing very well academically and was not a student who would likely have come for consultation with either a psychiatrist or a dean. I will let him speak largely for himself:

"I like to learn. I got a prize in high school for intellectual curiosity -- not that that means anything, but it seems to be fairly indicative. I like to take certain courses and the school requires me to take others, so that by the time I take everything that I have to and that I want to take, I always wind up with an overload." He had been taking approximately 70 hours each semester, which is 25 hours above the minimum required. He had maintained an A average since admission.

Later in the interview he remarked: "I tend to think and relate in concrete terms. Abstractness is fine provided it does not go too far."

I mean like in the math course. You go along and everything is fine until you come across some point which is perhaps just too far abstract. I have a little trouble but nothing that would really harm the course to any great degree."

It then developed that this was one of the few courses in which he had actually received a B on several quizzes. I queried him at this point in the interview about his notion for the snag.

"For me it is just a little too abstract. You either think in pure postulate form or you sit down and draw a nice little picture for all those topology problems. Well, I guess you'd call me a picture-drawer and I have a roommate who will read a problem dealing with logical processes and come out with an answer never having to think of it in concrete terms at all. Well, I can't do that." And he went on to relate this to the problems he had had in mathematics.

Let me draw your attention to the fact that the student who has been speaking to you had been judged proficient in his assignments in this course, receiving A's and B's on his examinations in this field. He went on to talk about his decision not to major in mathematics. He said that he could not think in the terms that he thought were required for theoretical mathematics. He did feel he could do well in experimental physics but in abstract mathematics or theoretical physics he lacked the cognitive "spark" that was really required for brilliance.

He then talked about those experiences that "sort of knocked the wind out of my sails." He felt he had adjusted to the fact that there were some things that he could not do. It helped, he said, to know that his roommate had strengths and weaknesses that were different from his own. "It balances out. Everybody has to make adjustments." From this he went on to describe his adjustment at the institution.

The year before, he had moved out of his dorm and into an off-campus apartment with several fellow students. He said "I room with a boy that I knew in senior high school. I mean, our whole life is essentially wrapped up in ourselves, the people who pull out of four schools in the Cambridge-Boston area. We tend to draw people to us rather than for us to go to the schools. I don't go too much out of my way so far as the school is concerned."

He and his friends have built their own small community quite apart from their separate institutions. It is important that their move from dorm to apartment was not a withdrawal from the intellectual life, certainly as they defined it. They would play recorders, they would read

poetry, they had all the accoutrements one would expect to find in an apartment in parts of Cambridge, including an extensive and chilling acquaintance with psychoanalytic jargon.

Let me quote another variation on this theme from his interview. "Speaking for myself, I have a very strong ego so places like (and he named the school) do not bother me. I just walk away from them." He described one of his professors who had been both sarcastic and demanding. He dealt with this professor by cutting classes and studying on his own. He had received an A while several classmates failed the course because "they got so mad they refused to work." Our student then remarked that he was never bothered by these things. He could insulate himself. He explained that his teacher's words rolled off his back. He did not let the teacher get under his skin. Let me quote: "A few teachers have gotten on my nerves but I'm not really out to beat the teacher. I would not give a professor the satisfaction of getting on my nerves to the point where it would hurt my standing in his course. My way of beating the teacher is to get the best grade that I can in his course. If I don't, then he has won. However, as you can tell from my grades, not too many have won."

I asked him where he might have developed this way of dealing with such difficulties. His extended answer to this question of mine follows: "I am a second child. I have an older brother, two years older. The second child tends to be easier-going than the first. This is doubly so due to the fact that my brother, at least while I was younger, appeared to be a bit of an ogre. You see my father was sick shortly after my birth, then died when I was 12. Consequently, I don't have much of a father image."

I do not intend to make fun of him, but you know this language that looks like insight can serve as a defense. We think we know when we don't. It may be easier to see in the student but we are all equally subject to this same error.

He continued: "My mother, though, is a fairly strong type of individual and eventually wound up making a living for the family. Being without a father and the fact that she was out of the house, we never saw too much of her so she always made us the men of the house, you know. My brother took this very literally. I mean, he was the master of the house. I mean, even at age 8 this kid ruled the place. Most of the time mother would go along with him, realizing that he would eventually grow out of it. If we were to go some place, he would say when he was ready to go and then we would go. When he came home, then we would eat; things like that. I always figured out how to get around him. Consequently, my defenses to people like this are good. You just 'yes' them and then turn around and do what you want anyway. In this respect the relationship with my brother worked out rather nicely."

Let us consider briefly representative inferences that might be drawn from this account that have pertinence for both the educator and psychoanalyst. First, this student's psychological response to his professor bore striking similarity to the pattern that he had developed to cope with his older brother. He used the same defenses of intellectualizing, of withdrawing, of isolating his feelings, in almost all his relationships at school, even as he had used these same defenses in an earlier time with his brother. In this one instance at least, his adaptation may well have been useful, with high academic survival value. However, this defensive position lay behind his move from dormitory to apartment. On one level it permitted him an educational experience that, by the objective measure of his grades, appeared to be an unqualified success. On close examination, however, all may not have been so positive. His real involvement with his professors was minimal, overshadowed in almost every instance by his private expectations of rebuke, ridicule and arbitrary direction.

He played the intellectual game and won, but avoided any commitment to the educational enterprise and in this sense lost the opportunity to make a meaningful commitment to learning. His brilliance and his brittleness repeatedly blocked him from seeing subtleties or exploring ideas for their own sake.

It would not be reasonable to infer that neurosis or unconscious complexes alone explain the educational transaction between the student and his teacher. Learning blocks or exam panic do not account for all failures in physics, for example. This transaction is influenced by a variety of conditional causes -- each with its effect on the student's educational experience. It is in this context that our understanding has been altered of what the college does for and to its students.

FACULTY CULTURE

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In helping us to understand the life of the faculty in the American college, novelists have thus far done much of the work. The novels include Mary McCarthy's The Groves of Academe, Randall Jarrell's Pictures From an Institution, Stringfellow Barr's Purely Academic, Carlos Baker's A Friend in Power, and, within the last year, Bernard Malamud's The New Life. The novelists have concentrated on the elite liberal arts colleges and universities of the Eastern Seaboard. With the private, high-status campus as setting, they have etched, often in acid, that: the college president today is a bureaucratic con man; the college professor, much of his time, thinks about power and engages in political shenanigans; the professor has dandruff on his glasses, patches on his elbows, and a home life fit to drive a normal man out of his mind; and when the professor is not maneuvering in campus politics, he is engaging in a love affair. Apparently the problems of order and freedom, of love and hate, are found on the campus, as elsewhere, conditioned by such distinctive features of the campus as collegial authority, the romantic coed, and the crossing of intellectual and often expensive tastes with modest income.

The social scientist has paid little attention to the culture of the faculty -- the perspectives, the attitudes and values held in common by a group of professors, especially as these are distinctively different from those of men located elsewhere in the social structure. We have, as a start, such work in sociology as Logan Wilson, The Academic Man, Paul F. Lazarsfeld and Wagner Thielens, Jr., The Academic Mind, Theodore Caplow and Reece J. McGee, The Academic Marketplace, and Alvin W. Gouldner's articles on local and cosmopolitan orientations in Administrative Science Quarterly (1957-58); and, in history, work such as George P. Schmidt, The Liberal Arts College, from which we gain, for example, knowledge about the life of the faculty in the residential college of the 19th century. This early work will be soon extended; some of the current studies of the changing values of students are also inquiring into the states of mind of the faculties in attempting to account for change or constancy in students' values. The 1960's promise greatly expanded research on faculties, for it is now clear that in the advanced industrial society -- the

society of the technological age -- higher education plays an expanded role in the training of men and their allocation to adult statuses. As colleges and universities move toward the center of the institutional stage, the perspectives of their key personnel seem to deserve greater attention. The values of faculties have always been intrinsically interesting, for colleges support the intellectual life and intellectuals like to speculate about their own training grounds. But in the past the professor could be considered quaint, a fellow whose cloistered world was largely detached from the real world, the world of the men of action who manned the major institutions of the economy and the government. Now, with education more closely connected to the economy and to national welfare, the professor apparently can never again be thought innocent. He is now importantly connected, and he is about to be importantly explored.

The cultures of academic men, like other subcultures, are often subtle and complex. Faculty cultures have many segments, and only a few aspects can be caught in any one net, no matter how fine the webbing of the net nor how large its size. Among its many parts, a faculty subculture may include political values, economic attitudes, a definition of the status of academic man in society, a point of view on whether a young person of 20 is to be treated as an adolescent or as an adult, and various prescriptions and proscriptions for the social life of a professor. The latter may cover behavior at cocktail parties, for example, with the subculture legitimating behavior from flirting to wife-swapping. This fascinating topic, along with many others, will be bypassed here in order to concentrate on orientations toward work, the faculties' definitions of crucial tasks, their work identities. Academic man's conception of his work role is a large domain in itself, one where the inquiries of the past are so meager that they leave the important findings to the future. Our knowledge is still largely common sense, and it covers very unevenly the variety of colleges and universities that make up higher education in this country.

The fact of diversity we must hold to the forefront in order not to be misled by the novel of elite-college manners or by the research that is concentrated at colleges and universities of high prestige. When we speak of college faculties in the United States, we are talking about 200,000 to 300,000 "objects" (depending on whether we count bodies or full-time-equivalents, and who is doing the counting). This is not such a terribly large number, especially for occupations in this country, but these people are spread around in such different places: about 150 universities, over 750 liberal arts colleges, 200 teachers colleges, 50 technological schools, over 525 junior colleges, and about 300 assorted theological schools, art schools, and detached professional schools -- all giving work credited toward a bachelor's or higher degree. (In addition there are an unknown

number of two and three-year semiprofessional schools and technical institutes that are entirely devoted to preparing students for immediate employment, without benefit of a regular degree.)¹ When speaking of college faculties, it helps to keep this variety of locations in mind.

I want first to describe some dimensions along which the perspectives of faculties vary and then name several simple types of orientation. Secondly, I will discuss the determinants of these orientations, which takes us into the question of where the different orientations appear and why. Thirdly, I will speculate on major changes taking place in the orientations of academic men, changes related to growing diversity and larger scale. There we will see the necessity of perceiving the variety of locations, for opposite trends are under way in different sectors of the system.

VARIETIES OF FACULTY ORIENTATION

What are some of the dimensions along which faculty values vary? One is loyalty to the college. Is the professor primarily committed to his college or to the world outside the college? The external commitment generally takes the form of interest in one's discipline or profession. Thus the alternatives are broadly The Organization versus The Profession; and orientation toward one or the other has been conceptualized as Localism versus Cosmopolitanism.² The faculty man characterized as a Local is high on loyalty to the college, low on commitment to specialized skills, and uses a group within the college as point of reference. What counts for the Local is the campus; there he shall stay. He is a company man. The Cosmopolitan is low on loyalty to the college, highly committed to specialized skills, and oriented to an outer reference group. What counts for the Cosmopolitan is the work and opinion of professional or disciplinary peers, who ordinarily are in other places; when the better professional opportunity appears, he is gone. He is not a company man; he is an itinerant expert.

¹Higher Education, U.S. Dept. of Health, Education and Welfare, Office of Education, Vol. XVII (January, 1961, p. 18:).

²Alvin W. Gouldner, "Cosmopolitans and Locals," Administrative Science Quarterly Vol. 2 (1957-58), pp. 281-306, 444-480. See also Peter M. Blau and W. Richard Scott, Formal Organizations (San Francisco: Chandler Publishing Company, 1962), pp. 64-71; and Everett C. Hughes, Men and Their Work (Glencoe, Illinois: The Free Press, 1958), p. 136.

There are important subtypes of academic Locals and Cosmopolitans. Among the kinds of Locals identified by Gouldner, there are the "true believers," committed to the college because it embodies values which they regard as important. There are the "bureaucrats," first and foremost committed to the place itself. Many persons, of course, instead of being subtypes of a pure formulation, are mixed breeds. These orientations, like others we shall discuss, are not usually found in pure form but are variously blended in persons. Indeed, the ideal faculty man in many places combines the virtue of expertise with the virtue of loyalty. He is highly competent and stands well in his discipline, and is also involved in college matters and committed to its long-run welfare.

The distinction between Young Turks and Old Guard that is voiced on campuses tends to parallel the Cosmopolitan-Local distinction. The Old Guard believe in the college's traditional ways and have long thrown in with it. The Young Turks want changes, they are usually more specialized and technically competent, and are often still in the job market.

A second important dimension of faculty orientation toward work is abstract study versus practice, the pure versus the applied. This dimension is largely defined by the social definition of which work and what people are one or the other. There is an extended consensus that men of the English Department are scholars while those in the Medical School or the School of Social Work are practitioners. Certain fields have been defined historically as areas of pure, disinterested study (the liberal arts), while other fields are defined as areas of application of the ideas generated in the "basic disciplines." Thus Education, Business Administration, and Engineering are usually seen as applied fields, even though some pure research and scholarly labor appears in each. The distinction between the pure and the applied often bitterly divides a faculty. Professors of chemistry and biology, as well as professors of English, scarcely conceal their disdain for the professor of marketing in the business school, and the scientist as much as the humanist can find the "educationist" intolerable. To say that these respective parties have a sense of difference, hold to different values, and associate in different circles would be putting it mildly for many campuses.

This particular dimension has been dramatized by William H. Whyte, Jr., in The Organization Man. In a section devoted to the training of the organization man, Whyte castigates higher education for inclining to the vocational, particularly business education. He discusses how the climate of the campus can become dominated by the tone of the business school, with the professors and students in the liberal arts on the defensive.

A third important dimension of faculty culture is the one stretching from humanistic modes of thought to scientific ones. At some liberal arts colleges, where the applied orientation has little footing, the humanist-scientist split is the fault along which the major earthquakes rumble. The split has been dramatized by C. P. Snow in his essay on the two cultures of the humanist and the scientist.³ In simplest terms, the Humanist is committed to personal interpretation, the Scientist to assertions that can be verified by others. The Humanist believes that the basic truths lie in the Great Literature; the Scientist, that truth lies in the latest discoveries that extend or modify the edifice of scientific knowledge. These perspectives are only part of the difference, however, around which humanistic and scientific subcultures are constructed on many campuses. The Humanists and Scientists are located organizationally in departments, divisions, and schools. a. They are competitive sectors of a campus; a larger bite of the campus pie taken by one is often at the expense of the other. In the past, men of the humanities were dominant. Since 1945, however, the scientists have become the dominant voice on campus after campus. The resulting interest-group struggle among major divisions over students, courses, buildings and money has made the humanists and scientists more aware of differences between them in point of view and style of thought, increasing the hostility and driving apart men who otherwise might not feel so challenged. Thus even on a campus of seventy-five faculty members, men of the one group may largely set themselves apart from the other and participate but rarely in the round of life of the other.

These are three dimensions along which faculty orientations may fall: local-cosmopolitan (with the Old Guard-Young Turk dimension roughly parallel), pure-applied, and humanistic-scientific. The local-cosmopolitan distinction points particularly to how a man is oriented to the college as a whole. The pure-applied and humanistic-scientific distinctions point particularly to work orientation -- to the nature of a work, how he defines it, and the style of thought he uses. There are other important dimensions. One might be containment-liberation, pointing particularly to the orientations of faculty toward students that range from indoctrination and close control to ethical relativism and complete permissiveness. The differences between deeply religious and secular liberal arts colleges in tone of faculty culture are in part along this

³C. P. Snow, The Two Cultures and the Scientific Revolution (Cambridge, England: Cambridge University Press, 1959).

dimension. Another factor may be men's style of personal relations. It makes a difference in the climate of a campus whether the cosmopolitans of a small campus are loners or organizers who cluster others around them.

The following discussion concentrates on two dimensions. The first is commitment to the college, dichotomized as the local orientation and the cosmopolitan orientation. The second is commitment to pure or disinterested study, which can be subdivided analytically into the liberal arts or strictly academic orientation and the applied or vocational or professional orientation. (This pure-applied dimension seems a more important distinction across the range of American colleges and universities than the humanistic-scientific difference.) If we combine the two dimensions, four types of faculty orientation emerge:

Commitment to Disinterested Work or Study

Identify		+		-
with	+	The Teacher		The Demonstrator
College	-	The Scholar-Researcher		The Consultant

Each is an abstraction referring to an orientation, and not to a person, but for purposes of easy reference I will name the types as if they were fully embodied in persons as, of course, in the extreme they might be.

The Teacher is committed to disinterested study and identified with the college. He is, in the romantic version, Mr. Chips. He is committed to students and to their general education; he is impatient with researchers and believes professionalism -- applied work -- is inappropriate in college.

The Scholar-Researcher is a cosmopolitan, little identified with the college, but is of the liberal arts in his commitment to general ideas, his lack of concern with application and practice. He is, in his scientific version, the chemist totally absorbed in the work of his laboratory; in his humanistic form, the professor of medieval literature.

The Demonstrator is a non-mobile professional, committed to the college and embedded in the local community. He is often a local professional or technician who comes to the college or university on a part-time basis to show apprentices how to do it. We find him, despite the absence of references to him in the literature, in a wide range of colleges. He is the local dentist serving on the staff of the dental

school, going from chair to chair in the dental students' clinic, checking their work. He is the faculty associate in the teacher education program, supervising 20 practice teachers. He is the carpenter or electrician teaching the old-line shop classes or the electronics expert preparing technicians for his industry, in the junior college. Demonstrators grow in number and importance as vocationalism and professionalism increase in higher education.

The Consultant is the big-time professional man, the man of the professional school who has a national reputation and mobility. Like the Demonstrator, he is primarily concerned with practice, the application of knowledge, rather than with disinterested study. But since he is well-known and mobile, he is not fully identified with the institution where he is currently located; tomorrow he may move to another spot in his field. He is also busy with his outside commitments, more than the research Cosmopolitans, since he consults with outside organizations and is caught up in the committee system of his profession. As a professional educator, for example, he consults with school systems locally and throughout the nation, attends a meeting of a committee of the National Education Association in Denver this week, gives an address to a state association of high school principals in Milwaukee the next. He has expertise, and will travel.

DETERMINANTS OF FACULTY SUBCULTURE

What determines the array of these orientations on campuses? Why do teachers, scholars-researchers, demonstrators, and consultants appear in widely varying strength across the landscape of American colleges? The determinants are many, and each campus has some unique conditions. Among the conditions of wide application, the following are particularly important: the role of the college; the objective interests of the faculty, induced partly by the role of the college and partly by the structure of rewards of the academic profession; and the scale and autonomy of the college.

Role of the College

Colleges become committed to a role or roles within the educational system and society. Roles are revealed in the actual character and practice of an organization, and may or may not be accurately reflected in what the organization says it is or says it does. American colleges and universities vary enormously in their roles. Some are

single-minded, others are all-embracing; some transmit a faith, others are secular; some serve only a narrowly specified constituency, others are wide open to all; some provide two years of study and connect to one set of occupations and others offer eight years of study and relate to a different segment of the occupational structure. The role of the college is perhaps the prime determinant of its array of faculty perspectives, and the distribution of faculty values among campuses is largely determined by the differing commitments of the colleges.

The role of the college affects faculty perspectives primarily through three means: recruitment, in which the college recruits for the points of view seen as appropriate for its character; interpersonal socialization, in which experienced members of the faculty and administration orient the recruit, informally and often unconsciously as well as formally and deliberately; and work socialization, in which the demands, pressures, and rewards of the job induce the man to assume a point of view (e. g., a person who wants to be a teacher in the university decides he had better become a researcher under a growing awareness of how the system works).

The impact of the role of the college can be suggested in a simplified way by considering the orientations demanded, rewarded, or allowed by the nature of several major kinds of institutions.

The Junior College. Of all the public colleges, the junior college sets its face the most sternly against the cosmopolitan orientations of research and professional consulting. The Researcher and the Consultant are almost completely absent. The junior college presses hard on its personnel for a total commitment to instruction. The Teacher and the Demonstrator are the major models, the major alternative orientations of the faculty, making the academic-vocational schism the critical cleavage. The presence of these two orientations and the absence of the other two relates directly to the roles of the junior college in providing short-term occupational training for its terminal students and transferable academic credit for students going on to further study. The college has little need for the scholar-researcher or for the big-time professional, and does not recruit or socialize for these orientations. It seeks the pure teacher and the man who can show the apprentices "how to do it."

The Four-Year College. To make any sense at all about four-year colleges, we must subdivide into at least three categories; first, the ones of high academic standing, nearly all of which are liberal arts and secular; second, the colleges of middle and low academic standing, some of which are secular, others are of modest religious connection, some of which are liberal arts, others are vocational -- and most are a mixture; and, third, the colleges whose foremost characteristic is their close relation to a church.

In the high-quality liberal arts college, the ideal type of faculty orientation in the past was the liberal arts professor totally committed to the college. He was the Teacher, but a teacher tinged with scholarship of a bookish, non-research sort. Teaching the undergraduate was the focus, backed and enriched by some scholarly labor.

These colleges today, with their commitment to an excellent undergraduate education for highly selected students with good academic preparation and high ability, continue to reward heavily for a teaching orientation. Their role asks for little professional-demonstration work, and there is no particular place for the big-time Professional Consultant. Since these colleges are places of relatively pure academic study, the applied orientations are little sought after. The top liberal arts colleges do, however, find it in their interest to seek and reward the research cosmopolitan. To instruct bright students, they need men up in their fields who will keep up in their fields, and these men are often researchers or men of intense scholarship. The top liberal arts colleges are also in the position of having to stay somewhat competitive with the universities; competitive in attracting students, in gaining resources, in maintaining an intellectually exciting environment to which able physicists or psychologists or professors of literature will come. Pure teaching is not enough, and increasingly will be less sufficient. Hence, men of serious research interests, men who may tomorrow go off to the university, are brought to the staff; laboratories are built, for the research work of the faculty as well as for the students; research funds are sought after, obtained, and plowed into the campus. Personnel decisions are made partly on the basis of a man's standing in his field -- not as much as in the university, but more than in the junior college, more than in the church-related colleges or in the four-year colleges of modest-to-low status.

When we consider the second class of four-year colleges, those of middle and low academic standing with either no church commitment or an attenuated one, we find quite a few organizations that belie their name. Most of these places go by the label of liberal arts college, when in fact they long ago compromised their liberal arts commitment with heavy doses of applied curricula -- setting up a nursing program to attract female clientele and make some money, for example, or plunging heavily into business and engineering. Also included in this second category are the numerous teachers' colleges which, in their traditional character, were heavily vocational. The character and role of these colleges had dictated that the Demonstrator should vie with the Teacher as the major faculty orientations, with the main strain between the applied and the liberal arts. These colleges are hardly attractive places for research scholars. Some are present, of course, but are likely to feel they are deviants

from the main tone of campus affairs. The teaching load is heavier than in the leading liberal arts college, the ratio of students to teachers is higher, the students are average in intelligence and a large proportion if not a majority of them are majoring in what the research-scholar generally thinks are fields appropriate for a trade or business school. The college needs faculty who will madly teach, be patient with the low-caliber student, and be tolerant of the more applied curricula.

The four-year colleges that are intimately tied to a church instruct the young within the framework of church doctrine. This organizational role has only a minor place for the cosmopolitans, either the researchers or the professional consultants. It emphasizes teaching, teaching committed first and foremost to the transmission of a faith. The teaching orientation appropriate to role is one that stresses containment within the perspectives of the faith, rather than the questioning-of-everything and deciding-for-one's-self form of liberation stressed in the leading secular liberal arts colleges.

The University. In the university, all four types of faculty orientation are present, each in considerable strength. The Teacher is the liberal arts professor committed to the undergraduate college or program; he is likely to have prestige in the humanities. Among other things he mans the "salt-mine" courses that the cosmopolitans disdain to teach, and serves on the committees that help the administration to run the organization. Since the American university, among its many commitments, finds its heaviest one the handling of a large undergraduate student body, it must ask for a teaching orientation, even when it does not reward for it. And it must ask the faculty to help run the machinery, and it appreciates the man who is so committed locally that he will serve beyond the call of duty. The Demonstrator, of course, is also present in large numbers, in the schools of the professions and quasi-professions, especially in the ones who start professional training in the undergraduate years.

The faculty orientations that tend toward dominance are those of the Cosmopolitans. The phenomenon of the university rewarding for research is so well known and often commented on that it hardly needs to be established. The research orientation is viewed by many observers, however, both within and outside the university, as a corruption due to prestige-hungry administrators and self-seeking professors who selfishly turn their back on the undergraduate. In fact, of course, the creation of new knowledge has high if not top priority among the roles of the university. With ever-large investments in innovation, the university will reward even more heavily for that part of the faculty man that is the researcher or productive scholar.

So, too, for the Consultant, the man of the professional-school faculty who has cosmopolitan ties. As the connection between the university and the top echelons of the occupational structure grow tighter, it is to the advantage of the university to bring men who are leaders in their profession into the professional schools, and to encourage men already in the professional schools to become influential members of the profession. This is a competitive business among universities and the school that discourages these professional commitments is choosing to lag in status. The work of the university Consultant also involves the question of whether the profession will control the professional school or vice versa, a matter of some issue in the relations of universities to professional accrediting associations. The Consultant is a more potent form of cosmopolitanism than the Researcher. The Researcher may indeed think only of his discipline, and may plunge into the work of his laboratory to the exclusion of other college affairs. But his work is isolating and he avoids power. The professional consulting orientation, in comparison, carries a man toward involvement in questions of influence, jurisdiction, control over professional practice and control in university affairs.

The role of the college or university is, then, the foremost determinant of the distribution of these major types of faculty orientation on a campus. The orientations are not accidentally distributed, their rate of appearance in various locations is not due to personal motivation. They are structurally induced, each made strong or weak on a campus by the tasks to which the college has committed itself.

Faculty Rewards and Interests

The second major determinant of faculty points of view is the structure of interest of the faculty. What is it in their interest to do, as they see it? Faculty interests are partly determined by the role of the organization; in this case they are a mechanism through which faculty orientations are decided by organizational role. For example, the junior college tells its teachers they will be judged on the basis of teaching and this defines an interest of the teacher. But faculty interests are not completely determined in this way; they are in part independent determinants of what the faculty will define as important work and how they will orient themselves toward it.

Status achievement is a case in point. The search for status is everywhere an interest of faculty members that affects their orientations, and the grounds on which status is achieved are partly set by academics at

large, by the traditions of academia. The grounds of status frequently run counter to organizational role. The most frequent form of inconsistency, of combat between faculty status striving and organizational role, is the desire of the faculties of lower-status colleges to be like, or appear to be like, the faculties of higher-status institutions. Administrators are rarely able to recruit so closely for "appropriate" orientations that they exclude faculty whose definition of their own interest includes wanting to transform the college -- by upgrading it academically, or by getting rid of the parts of the curriculum that have low educational respectability. Faculty recruits join colleges with whose values they are not in sympathy because they need a job, or because they come to know its true character only after they join. Thus, in the junior college, we often find an active minority of the teachers stirring about, defining themselves as scholars or researchers, holding up the liberal arts college or university as model. For them, to be "merely" a teacher, especially a teacher who spreads himself across three or four disciplines, is wrong. Their teaching work sometimes induces them to this point of view. The teacher in the junior college has students transferring to other institutions, and his reputation with others and particularly with himself depends in part upon how well these students hold up. To prepare them well depends on being up in a field, which depends on time to read and think, perhaps even time to do a little concentrated research and writing; in short, to be about as scholarly and focused on a discipline as the professors of the four-year college or the university.

Organizational Scale and Autonomy

Two other determinants of faculty culture illustrate a broad class of factors having to do with the general structure of a college. One is sheer scale, the size and complexity of the college. Increasing scale has its major impact on faculty culture by increasing the heterogeneity of points of view. A campus of 50 faculty members may have a unified culture; in a campus of 500, unity of outlook and style is virtually impossible. Large size sets the possibility of a large array of subcultures. Considerable complexity of organization, usually a correlate of large size, sets the possibility that subcultures will form along many dimensions, for the complex organization usually has a work force split into many groups that pursue different rather than identical lines of work. The sub-groups are not duplicate cells, or units split on a single criterion, but are unlike cells, established by multiple criteria. Thus a liberal arts college growing larger finds an increasing variety of subcultures, some formed by diverging

disciplines, some by the changed physical layout, some by the addition of a counseling staff, a public relations office, a bevy of deans. Particularly important in the greater impersonality of the larger campus is the splitting of faculty and administrative groups from one another.

Organizational autonomy, another factor, refers to the extent of integration of the college with its environment. Highly autonomous campuses are likely to have a highly distinctive culture or array of sub-cultures, both student and faculty. They are set apart; on some campuses there is even an explicitly-voiced philosophy of two worlds -- our world, the world of the saving remnant, and the other world, the world of the unlucky majority. Autonomy and distinctive orientation interact strongly. On campuses that are nearly one with their environment, with little autonomy, the chance of distinctive orientations is lessened. Faculty modes of thought and style of life are continuous with the other world. Low autonomy works to strengthen on campus the orientations common in the community and expected of the college by neighboring laymen. These orientations are teaching and demonstration -- the getting-on with the business of instilling the proper values in the young and preparing them for a job. Not so well understood by the citizen are the orientations of scholarship and research (e. g., the idle curiosity of a man who spends his life attempting to understand what happened 5,000 years ago). In short, when colleges and universities have little autonomy, and hence are vulnerable to intrusion, certain faculty orientations will be favored while others will be made precarious. We may note that many state universities feel they must protect research by hiding it in the budget. This can be called the autonomy of ambiguous bookkeeping. A hidden subsidizing of research is considered necessary because of the sense that laymen are not sympathetic, that if research were identified in the budget by close cost accounting the legislature would reduce the level of support.

CHANGES IN FACULTY SUBCULTURES

Faculty subcultures are changing under the impact of modern social forces in at least three important ways: (1) a greater differentiation of the Cosmopolitans and the Locals; (2) the narrowing of the subcultures to occupational orientations; and (3) a trend from a unified campus typical of a community to an array of subcultures appropriate to a federation or a large bureaucracy.

Differentiation of Cosmopolitans and Locals

The dominant trend in the occupational structure generally is toward expertise and professionalism, and so it is in higher education. Among the four types of orientation, this trend downgrades the teacher and upgrades the researcher and the two professional or applied-work types. In the leading liberal arts colleges and in the universities, and in the colleges that take one or the other as model, we can anticipate ever-greater specialization, ever-greater ascendance of the experts over Mr. Chips. As more colleges move from local to national recruitment of students and faculty, they come under the pressures of the Big-Time -- a world of experts, some renowned nationally through their research or professional visibility, some known only locally but still having at their command a specialized competence.

The role of providing a liberal education in the college years is everywhere undergoing change. More students and more faculty are seeing the undergraduate years as preparation for graduate school, and there is growing pressure to define two if not all four of these years as pre-professional or pre-graduate school training. As the high school improves its academic work, the liberal education task is moved downward, encouraging an implicit if not explicit understanding that one's general education is largely over after the freshman or sophomore year of college, and that specialization then begins.

To the pressures of the increased specialization in disciplines, liberal arts colleges respond by offering faculty some of the attractions of the university life, i. e., light teaching load, limited counseling, more time for research, reflection, and writing. Patterns of faculty recruitment are changing as liberal arts colleges compete on these grounds. The idealized faculty man in the best liberal arts college increasingly is the man who keeps up with a specialized area by being himself a

specialist. There is some leeway here, some choice, but not much. The liberal arts college either brings three kinds of biologist and four kinds of chemist to its staff or else it slides behind.

If we scan the variety of locations of faculties, however, the trend toward professionalism is not everywhere dominant. This country is embarked on a major effort to put college near the student's home, and as many campuses move into national orbits, many others are being spawned to serve very local areas -- in effect, to serve the home town. These colleges do not reward for cosmopolitanism, they want their men to shy away from the Big Time. The rapidly growing number of local colleges increases greatly the number of men with a local orientation, the men with a pure-teaching approach much like secondary education.

These opposing trends mean a greater differentiation, in the sense of the piling up of specialization in some places and a bunching of other orientations in other places. The trend toward professional and cosmopolitan orientations is strong in higher education in this country, but it is not spread evenly across the landscape and the counter-trend is stronger in some parts of the system.

Discipline as Subculture

A corollary of specialized work is specialization in point of view, in perspective, a phenomenon familiar to men experienced in organizational affairs. Both the work and the points of view are commonly connoted in higher education by the term "discipline." It is around the disciplines that faculty subcultures increasingly form. As the work and the points of view grow more specialized, men in different disciplines have fewer things in common, in their background and in their daily problems. They have less impulse to interact with one another and less ability to do so. The large mass university represents the extreme case of a single intellectual culture giving way to a variety of occupational or disciplinary orientations. But one can also observe the phenomenon in small colleges.

Community to Federation

The tightly-knit academic community with a relatively unified faculty culture is thus changed in our day into an entirely different kind of system by the joint impact of increasing scale and professionalization. The concept of academic community is a myth of considerable value in most colleges and universities, but is not to be taken seriously as a

description of the actual state of affairs in most places now and in the foreseeable future. In fact, the concept of federation seems more appropriate to many universities, composed as they are of a large number of quasi-autonomous professional schools, colleges and departments. Within the federation, held together by a loose bureaucratic structure, many nations and tribes live their own ways. Men of the sociological tribe rarely visit the land of the physicists and have little idea of what they do over there. If the sociologists were to step into the building occupied by the English department, they would encounter the cold stares if not the slingshots of the hostile natives. In a community, interests are held much in common and the consensus is extensive. But a federation of divergent disciplines is not coordinated by the easy interaction of men of common interests. Rather, the disciplines exist as separate estates, with distinctive subcultures, and are coordinated by the impersonal means of large organization. To understand faculty culture on the larger campuses, we must, in all likelihood, let go of the ideas of community and unified culture, and instead focus on the departments and the array of disciplinary subcultures that today split the faculty.

INTERACTIONS AMONG ACADEMIC, ADMINISTRATIVE, AND STUDENT SUBCULTURES

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In a complex college or university there are many environments. Neither the characteristics of students (or student culture) nor the characteristics of faculty and curricula, nor the characteristics of administrations, provide by themselves a sufficient base for describing the environment as a whole. Few if any organizations are so monolithic or so totally controlled that all of their parts operate in complete harmony with one another. The dynamics of the environment, or the interactions between major parts, need to be considered.

Generalizations about the college environment are related to the methods and data used to arrive at them. Howard Becker, defining student culture as a set of understandings shared by students and a set of activities congruent with them, and using the method of participant observation, concluded that "doing well" in the midwestern state university environment he studied meant making friends, being in activities (learning how to influence people, function in an organization, etc.) and maintaining satisfactory grades. Benson Snyder observed that an institution puts a premium on some adaptive patterns and a penalty on others, basing this on intensive interviews with a small number of students and the fact that they often cited the first experience of a low grade, the confrontation of inflexible time demands, and the coldness of the institution as producing stress on their adaptive behavior. Both of these direct and thorough explorations of students' behavior and feeling provide insight into the characteristics of the college environment. At the same time it is clear that the students' reactions are, in part, a response to conditions created by the activities of faculty members and administrators. A usefully diagnostic view of the college culture might be obtained if one tried to separate the potential influence of administrative, academic, and student aspects. The present paper is the first progress report of an attempt to do this.

THE MEASURING INSTRUMENT

A measuring instrument, called the College Characteristics Analysis (CCA)¹, was constructed to provide an analytic description of the college environment. The environment was conceived as having three structural aspects -- administrative, academic, and student. This conception stemmed partly from a study reported in 1949 by Janet Kelley, on College Life and the Mores. It also stemmed from a consideration of institutional characteristics commonly assessed in an accreditation review (not including characteristics likely to be outside the knowledge and experience of students, such as investment policies, accounting procedures, faculty government, etc.).

Structurally, then, the college environment was defined in the following terms:

1. The Administrative Community
 - a. rules and protocols
 - b. facilities (equipment, buildings, landscape, etc.)
 - c. overall features
2. The Academic Community
 - a. characteristics of the faculty
 - b. curricula
 - c. instruction (classroom activities, assignments, examinations, etc.)
3. The Student Community
 - a. characteristics of students
 - b. extra-curricular programs
 - c. informal student activities

¹The CCA has not been published for general use. Sample copies may be obtained from the author.

Additionally, various rules, facilities, classroom activities, extra-curricular programs, etc., were judged as having, cumulatively, one of four main directions of influence or emphasis: 1) an intellectual, humanistic, esthetic emphasis; 2) a friendly, group welfare emphasis; 3) an emphasis toward independence and scientism; or 4) a practical, interpersonal status emphasis. These patterns of emphasis were ones which had emerged from previous factor analyses of the 30 environmental press scales in the College Characteristics Index (CCI).² In short, the College Characteristics Analysis (CCA) was designed to characterize environments along four broad dimensions (or directions of emphasis), and three broad structural categories (or sources of emphasis).

The nature of the instrument is further illustrated by the sample items reproduced below. These are arranged according to the structural and directional categories described above. In the complete test each of the four major patterns of emphasis is measured by a set of 45 items, of which 15 refer to the administrative, 15 to the academic, and 15 to the student areas or sources of emphasis.

The instructions for students responding to the test are merely to mark each statement as generally true or generally not true. The students act as reporters, saying what they believe to be true or not true from their observation and experience as inhabitants of the environment. The instructions are further diagnostic in specifying the parts of the college or university to which the students' replies should refer. Thus, for statements related to the academic area, a student's answers refer to the academic part of the college or university with which he identifies -- such as Engineering, Business, Education, Sciences, Literature, Social Sciences, Music etc. For statements related to the student area, his replies refer to the students he knows best or associates with most commonly, and to the extra-curricular and informal activities he knows about because he or his friends are or have been involved in them. Statements related to the administrative area are answered with reference to the college or university as a whole. The general idea in back of these diagnostic instructions is that a student is probably more clearly aware of and more strongly influenced by the characteristics of the particular parts of the total environment with which he most closely identifies -- his major field or division, and his student friends -- than by the academic program in general or the students in general. With these diagnostic instructions, the instrument provides a way of estimating the characteristics of subcultures -- academic and student -- so that differences between subcultures can be

²Pace, C. Robert. Five College Environments. College Board Review, Spring 1960.

ILLUSTRATIVE CCA ITEMS

Sources of Emphasis	Direction of Emphasis			Practical, Status-Oriented
	Intellectual, Humanistic Esthetic	Friendly, Group Welfare	Independent, Scientific	
Administrative	"Students are allowed to help themselves to books in the library stacks"	"The student government has a responsible role in regulating student behavior"	"Students who don't make passing grades are quickly dropped from school"	"Student organizations must get administrative approval to take a stand on controversial issues"
rules and protocols				
facilities	"There is a theater on or near the campus specializing in foreign films"	"Dormitories are nicely arranged for small informal gatherings"	"Laboratory facilities in the natural sciences are excellent"	"Athletic facilities are modern and well equipped"
overall features	"The school has an excellent reputation for academic freedom"	"The school helps everyone get acquainted"	"Students here are encouraged to be independent and individualistic"	"There is a lot of fanfare and pageantry in many of the college events"
Academic	"Many of the professors are actively engaged in writing"	"Many faculty members are active in community work-churches, charities, schools, service clubs, etc."	"Many of the professors are actively engaged in research"	"Faculty members always wear coats and ties on the campus"
faculty				

Illustrative CCA Items (Continued)

Sources of Emphasis	Intellectual, Humanistic Esthetic	Friendly, Group Welfare	Independent, Scientific	Practical, Status- Oriented
Academic (cont'd.)				
curricula	"There are good opportunities for students to study & criticize important works in art, music, and drama"	"Many courses are designed to prepare students for well-informed citizenship"	"Accelerated or honors programs are available for qualified students"	"Many courses stress the concrete and tangible rather than the speculative or abstract"
instruction	"Class discussions are typically vigorous and intense"	"Students who are having difficulty with a course are encouraged to talk with the professor about it"	"Frequent tests are <u>not</u> / given in most courses"	"Students almost always wait to be called on before speaking in class"
Student				
student characteristics	"Students set high standards of achievement for themselves"	"Students have a lot of group spirit"	"Many students are planning careers in science"	"Students are more interested in specialization than in general liberal education"

Illustrative CCA Items (Continued)

Sources of Emphasis	Intellectual, Humanistic		Friendly, Group Welfare	Independent, Scientific	Practical, Status-Oriented
	Esthetic				
Student (cont'd.)					
extra-curricular programs	"Many students belong to departmental clubs: i. e. French club, Philosophy club, Math club, etc. "	"Many upper classmen play an active role in helping new students adjust to campus life"	"Receptions, teas, or formal dances are seldom attended"	"Student elections generate a lot of intense campaigning and strong feeling"	
informal activities	"Many students are attracted to concerts and art exhibits"	"Students often have small parties to celebrate pleasant events"	"Most students <u>do</u> not <u>dress</u> and act pretty much alike"	"There is very little studying here over the weekends"	

compared. For example, how different are the various academic subcultures from one another? Is the emphasis from administrative characteristics consistent with the emphasis from academic characteristics? Is the student community supportive of or at odds with the emphasis in the academic community? In summary, the design and intent of the test are aimed toward a diagnostic evaluation of the role of major subcultures in the environment of complex colleges and universities.

One must clearly understand that the test does not purport to describe the college administration or the administrative community as such, or the curriculum or extra curriculum, or the faculty, as such. Items are classified as administrative when they refer to conditions, practices, etc. which exist or not primarily because of, or probably because of, the actions or decisions or attitudes of administrators. Similarly, items are classified as academic when they refer to conditions, practices, etc. which exist or not primarily because of, or probably because of, the actions or decisions or attitudes of faculty members.

SOURCES OF DATA

Responses to the CCA have been obtained from upperclassmen in nine colleges and universities. For purposes of this report, each college is identified by number. General information about each college, and information about the number of individuals and subgroup tested in each, are shown in Table 1. The nine colleges are not representative of any predefined larger group of colleges. The range in their size and complexity was, however, deliberately chosen so as to test certain hypotheses about the magnitude of differences between subcultures as related to these features. Complexity was judged by the percent of students in the sample whose major fields were outside of the liberal arts -- i. e. in such fields as Education, Engineering, Business, Nursing, etc. Since the selection of students tested in all colleges was determined by at least rough sampling procedures, the per cent of the sample outside liberal arts is a reasonable approximation for the college. The size of the sample tested ranged from more than 50 per cent of the senior class, in colleges 1 and 2, to 10 per cent to 15 per cent of the senior class in colleges 8 and 9. With relatively few exceptions, most of the academic subgroups were composed of between 10 and 25 persons. There were some (about 10 per cent) having fewer than 10 cases (usually 8 or 9); and there were others (about 20 per cent) having more than 30 cases. The median size was 17.

TABLE 1

COLLEGES STUDIED AND DATA OBTAINED FROM EACH

	Approximate enrollment	Location	Control	Estimated size of senior class with CCA	Number of upper-classmen tested	Number of academic subgroups analyzed	Approximate per cent of sample outside of Liberal Arts
College 1	300 (women)	New England	Private	70	48	3	none
College 2	900	Middle Atlantic states	Private	180	91	5	none
College 3	1,200	Midwest	Private	240	119	10	25%
College 4	1,900	Midwest	Lutheran	300	98	7	25%
College 5	2,200	Midwest	Methodist	400	139	9	15%
College 6	2,200	Northwest	State	350	121	9	60%
College 7	4,100	South	State	700	250	6	65%
College 8	12,000	California	State	2,000	320	11	55%
College 9	12,000	Southeast	State	2,000	207	7	60%

PATTERNS OF ANALYSIS

The responses to the CCA have been analyzed separately for each of the nine colleges, but the pattern of analysis has been the same in all colleges. First, the students have been divided into appropriate academic subgroups, based on the information recorded on the answer sheet. Second, for each academic subgroup all 12 of the CCA 15-item scales were scored. Since these scales can also be grouped into sets of four 45-item scales, total scores on these were also obtained. Third, means and sigmas for all of the above were computed. Fourth, for each scale a weighted mean across subgroups was obtained, so that the mean score of each subgroup could be seen as deviating plus or minus a given number of points from the weighted composite of subgroups -- i. e., the college as a whole. Fifth, on each scale the range of means across academic subgroups was also recorded, together with the average range. Sixth, in each of the four 45-item scales measuring the direction of emphasis, mean scores on the three 15-item scales comprising it (administrative, academic, and student sources of emphasis) were compared with one another to assess the relative contribution of each source to the total score.

College No. 5 has been selected to illustrate this pattern of analysis. Table 2 presents the basic data for the college. In addition to showing the mean scores for each subgroup, the table also gives the composite mean scores (the weighted mean of all subgroups combined), and notes the range of means across subgroups on each scale.

Differences between means have not been tested for statistical significance. However, considering the typical size and sigma of subgroups in all of the nine colleges, one can estimate the magnitude of differences between means that will characteristically prove significant as follows:

	Differences between means for significance	
	at 1% level	at 5% level
15-item scales (part scores)		
between any two subgroups	1.8	1.5
between any subgroup and the composite	1.5	1.2
45-item scales (total scores)		
between any two subgroup totals	4.2	3.4
between any subgroup total and the composite total	3.2	2.6

TABLE 2

MEAN SCORES OF EACH ACADEMIC SUBGROUP ON EACH CCA SCALE,
COLLEGE NUMBER 5

Academic Subgroups															
CCA Scales		Psych.	So. Sci.	Hist. & Phil.		Phys. Sci.	Eng. & Biol. Sci.		Lang.	Speech Art Music		Educ.	Composite Mean		Range of Means
<u>Intellectual</u>															
<u>Humanistic</u>															
<u>Esthetic</u>															
	Ad	8.2	7.8	7.9	8.6	7.9	7.5	7.4	8.6	8.3	8.0				1.2
	Ac	10.5	8.6	11.1	9.8	10.5	10.3	10.3	9.6	6.8	9.7				4.3
	St	7.4	7.8	7.0	7.0	5.6	7.7	8.5	8.9	7.9	7.5				3.3
	Total	26.1	24.2	26.0	25.4	24.0	25.5	26.1	27.1	22.9	25.3				4.2
64															
<u>Friendly</u>															
<u>Group</u>															
<u>Welfare</u>															
	Ad	10.8	10.3	11.5	9.3	9.7	12.1	12.5	11.4	12.1	11.1				3.2
	Ac	10.5	10.9	10.5	9.8	10.5	10.4	11.0	8.7	10.5	10.4				2.3
	St	10.6	10.8	10.7	10.6	11.0	11.5	12.0	11.2	11.1	11.0				1.4
	Total	31.8	32.0	32.5	29.8	31.2	34.0	35.5	31.3	33.6	32.4				5.7

TABLE 2 (Cont'd.)

MEAN SCORES OF EACH ACADEMIC SUBGROUP ON EACH CCA SCALE,
COLLEGE NUMBER 5

		Academic Subgroups											
CCA Scales		Psych.	So. Sci.	Hist. & Phil.	Phys. Sci.	Biol. Sci.	Eng. & Lit.	Lang.	Speech Art	Educ.	Composite Mean	Range of Means	
<u>Independent Scientific</u>													
Ad	5.8	5.6	5.6	5.6	5.8	5.4	6.1	6.0	5.9	5.7	5.8	.7	
Ac	8.8	5.7		8.6	8.0	8.5	7.8	7.1	7.1	6.5	7.7	3.1	
St	4.2	5.7		3.6	4.6	3.9	3.4	4.4	3.5	2.9	3.9	2.8	
Total	18.9	16.9		17.8	18.3	17.8	17.2	17.5	16.5	15.1	17.4	3.8	
65													
<u>Practical Status-Oriented</u>													
Ad	9.6	8.9		8.7	8.1	8.5	9.7	9.5	9.4	9.8	9.2	1.7	
Ac	7.7	7.9		7.3	8.1	8.5	7.7	7.9	7.5	8.8	7.9	1.5	
St	10.1	10.2		10.4	10.6	10.1	10.4	11.1	9.4	10.6	10.3	1.7	
Total	27.4	27.0		26.4	26.8	27.1	27.8	28.5	26.3	29.2	27.4	2.9	
N	30	12		17	12	11	19	8	10	20	139		

Using this guide, one can see that except for the Friendly, Group Welfare variable, there are no significant differences in the perception of administrative characteristics by the various subgroups at College No. 5. (If the range of means across subgroups is less than 1.8 for the part scores, then no pair of subgroups differs significantly at or beyond the one per cent level.) There are, on the other hand, a good many subgroups which differ significantly from one another in their members' perceptions of its academic characteristics.

A more general view of the college can be seen in Table 3. This shows the amount by which the mean total score for each subgroup differs from the composite total score of all subgroups. With respect to each of the four major variables it suggests whether students in the various subgroups have appreciably different perceptions of the college as a whole. The figures are directly obtainable from the previous table; for example, the mean total score of Psychology students on the Intellectual, Humanistic, Esthetic scale was 26.1, which is +.8 higher than the composite mean total score of all subgroups of 25.3. Since a difference of 3.2 is required for statistical significance at the one per cent level, it is clear from Table 3 that none of the deviations between any subgroup and the composite are significant to this degree, although, on the Friendly, Group Welfare scale, both the language group and the physical sciences group differ from the composite at or beyond the five per cent level of confidence. One can also note, from this same table, whether the total scores of any two subgroups differ significantly from each other. The criterion for a significant difference here is 4.2 at the one per cent level and 3.4 at the five per cent level. Except on the Practical, Status-Oriented scale, there are significant differences beyond the five per cent level between one or more pairs of subgroups on each of the other three major directional variables.

Table 4, using the Intellectual, Humanistic, Esthetic variable for illustration, presents score comparisons which suggest the interaction between administrative, academic, and student influences. The data come directly from the mean scores initially reported in Table 2. For example, the first row in Table 4, the Psychology subgroup, shows that the academic score is 2.3 higher than the administrative score. In Table 2 the academic score of this subgroup is 10.5 and the administrative score is 8.2, the difference between them being 2.3. The composite differences in the last row of Table 4 were similarly obtained from the composite means shown in Table 2. From Table 4 one can see that, in all but one of the major subgroups, the Intellectual, Humanistic, Esthetic emphasis comes more strongly from the academic area than from either the administrative or the student areas.

TABLE 3

DEVIATIONS OF EACH ACADEMIC SUBGROUP MEAN
SCORE FROM COMPOSITE MEAN SCORE

Subgroups	Scales			
	<u>Intellectual Humanistic Esthetic</u>	<u>Friendly Group Welfare</u>	<u>Independent Scientific</u>	<u>Practical Status- Oriented</u>
Psychology	+ .8	- .6	+1.5	0
Soc. Sci.	-1.1	- .4	- .5	- .4
Hist. & Phil.	+ .7	+ .1	+ .4	-1.0
Phy. Sci.	+ .1	-2.6	+ .9	- .6
Biol. Sci.	-1.3	-1.2	+ .4	- .3
Eng. & Lit.	+ .2	+1.6	- .2	+ .4
Languages	+ .8	+3.1	+ .1	+1.1
Speech-Art-Music	+1.8	-1.1	- .9	-1.1
Education	-2.4	+1.2	-2.3	+1.8
Range of Deviations	4.2	5.7	3.8	2.9

TABLE 4

DIFFERENCES IN MEANS OF INTELLECTUAL, HUMANISTIC,
ESTHETIC, EMPHASIS SCORES BETWEEN ADMINISTRATIVE,
ACADEMIC, AND STUDENT SOURCES OF EMPHASIS FOR
EACH ACADEMIC SUBGROUP, COLLEGE NUMBER 5

Subgroup	Differences in Means		
	<u>Ad vs. Ac</u>	<u>Ad vs. St</u>	<u>Ac vs. St</u>
Psychology	2.3(ac) ^a	(ad) .8	(ac)3.1
Social Sciences	.8(ac)	0	(ac) .8
Hist. & Phil.	3.2(ac)	(ad) .9	(ac)4.1
Physical Sciences	1.2(ac)	(ad)1.6	(ac)2.8
Biol. Sciences	2.6(ac)	(ad)2.3	(ac)4.9
Eng. & Lit.	2.8(ac)	.2(st)	(ac)2.6
Languages	2.9(ac)	1.1(st)	(ac)1.8
Speech-Art-Music	1.0(ac)	.3(st)	(ac) .7
Education	(ad)1.5	(ad) .4	1.1(st)
Composite ^b	1.7(ac)	(ad) .5	(ac)2.2

^aThe notation in parenthesis indicates which source has the higher mean score.

^bDifferences here indicate the relative overall strength of the three sources of emphasis. Thus, in the first column, the mean academic emphasis toward the Intellectual, Humanistic, Esthetic direction is 1.7 higher than the mean administrative emphasis in this direction.

DIFFERENCES BETWEEN COLLEGES

Before the data for College No. 5, or for any of the colleges, can be interpreted in greater detail, tables showing differences within and between all the colleges need to be examined so that any one college can be seen in larger perspective.

Table 5 reports the composite mean scores on all the scales for all the colleges. The large differences between some of the colleges are obvious, indicating that the group as a whole reflects at least some of the diversity characteristic of higher education.

Table 6 shows the range of means across academic subgroups within each of the colleges, for each of the three segments of the college -- administrative, academic, and student. One can see, for example, that in the smallest college (College No. 1) the ranges of means are so small that none of the differences between subgroups within the college can be significant. It is also evident that the fewest instances of significant differences between subgroups will be found in the scales reflecting administrative sources of emphasis; and the greatest number of significant differences will be found in the academic scales. Except for College No. 1, there are at least some significant differences (at the five per cent level) between academic subgroups on all four of the major directional variables in all of the other eight colleges.

Table 7 records the highest and lowest mean scores on each of the four directional variables within each college. Reference to Table 2 will indicate where these figures come from in the case of College No. 5, and similarly for the other colleges. Looking across the band of mean Intellectual, Humanistic, Esthetic scores for College No. 5 (in Table 2) one can see that the highest score is 11.1 (ascribed to the academic area by History and Philosophy majors) and the lowest score is 5.6 (ascribed to the student area by majors in biological sciences), and that this difference represents a range of 5.5 points. Table 7 also shows the range of differences between colleges. The differences between colleges were always greater than the differences among subgroups within any one college. Typically, these differences between colleges are two to three times greater than the differences among subgroups within colleges.

INTERACTIONS BETWEEN PARTS OF THE ENVIRONMENT

Table 8 provides the basis for estimating in each college the degree to which administrative, academic, and student sources of emphasis

tend to be mutually supportive of one another in their direction of influence. Again, by referring to College No. 5 and the data reported for it in Table 4, one can see the source of these figures. In interpreting these composite mean differences, shown in Table 8, one again needs a guideline. If all the scales tended to be of equal difficulty one could compare differences between them directly. But the likelihood of getting a high score on some scales is greater than it is on others. The only available corrective to this is the average score across all nine colleges. The bottom row of figures on Table 5 listed these average composite mean scores. For example, then, the average composite mean score on the administrative scales reflecting the Intellectual, Humanistic, Esthetic emphasis was 9.7, for the academic scales 9.8, and for the student scales 8.8. Thus the typical difference on this variable between administrative and academic scores was .1, between administrative and student scores .9, and between academic and student scores, 1.0. These baseline data for all the variables are as follows:

	<u>Ad vs Ac</u>	<u>Ad vs St</u>	<u>Ac vs St</u>
Intellectual, Humanistic			
Esthetic	.1(ac)	(ad) .9	(ac)1.0
Friendly, Group Welfare	1.2(ac)	1.6(st)	.4(st)
Independent, Scientific	(ad) .2	(ad)2.0	(ac)1.8
Practical, Status-Oriented	(ad) .6	.3(st)	.9(st)

To facilitate reading Table 8, an asterisk is shown for all comparisons in which the differences at a particular college deviate by 1.0 or more from the typical difference. In College No. 1, for example, the difference between administrative vs. academic in the intellectual, humanistic, esthetic variable is .9, with the administrative being higher. Since the typical difference is .1 with the academic being higher, the difference between .9 in the administrative direction and .1 in the academic direction is .9 plus .1, or 1.0; thus the figure is marked with an asterisk. In the administrative vs. student comparison the difference shown is 2.0, the typical difference is .9 (both in the administrative direction), so the difference at College No. 1 is 1.1 points greater than the typical difference and is therefore noted with an asterisk. Whenever the amount and direction of difference is marked with an asterisk it means that the relative emphasis at the college is substantially greater than what is typical for the nine colleges as a group. Thus for College No. 1, the emphasis toward intellectual-humanistic-esthetic objectives comes with greater obviousness from the administrative community than from either the academic or student communities.

TABLE 5

SUMMARY OF THE COMPOSITE MEAN CCA SCORES, NINE COLLEGES

Colleges	Intellectual Humanistic Esthetic			Friendly Group- Welfare			Independent Scientific			Practical Status- Oriented		
	Ad.	Ac.	St.	Ad.	Ac.	St.	Ad.	Ac.	St.	Ad.	Ac.	St.
Number 1	13.2	12.3	11.2	6.7	8.5	6.0	10.2	10.5	6.8	2.7	1.4	2.7
Number 2	11.6	11.8	11.9	6.6	8.3	8.8	10.3	11.0	9.6	4.4	3.4	3.5
Number 3	13.0	11.2	11.5	7.2	10.5	9.1	10.6	10.2	8.3	2.6	3.3	3.4
Number 4	9.2	10.4	10.7	11.0	11.2	13.1	7.7	8.0	5.1	7.9	7.3	8.0
Number 5	8.0	9.7	7.5	11.1	10.4	11.0	5.8	7.7	3.9	9.2	7.9	10.3
Number 6	8.2	8.4	6.3	8.8	9.8	10.6	8.6	7.0	5.6	7.6	8.8	8.3
Number 7	6.9	7.7	6.1	8.1	8.9	10.1	6.7	7.2	6.7	10.2	9.7	11.3
Number 8	9.3	8.3	7.5	7.9	8.7	10.4	9.8	7.4	7.2	9.0	8.9	9.0
Number 9	7.9	8.6	6.9	7.4	8.8	10.1	8.9	7.5	7.4	10.0	8.2	9.7
Average, all colleges	9.7	9.8	8.8	8.3	9.5	9.9	8.7	8.5	6.7	7.1	6.5	7.4

NOTE: The total scores sometimes differ by .1 of a point from the sum of the three-part scores because of the arbitrary rounding of numbers.

TABLE 6

RANGE OF MEANS ACROSS ACADEMIC SUBGROUPS, WITHIN EACH OF
THE NINE COLLEGES, FOR ADMINISTRATIVE, ACADEMIC, AND
STUDENT AREAS

	Colleges									Average Range
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	
Intellectual										
Humanistic										
Esthetic										
Ad	.3	1.8	1.0	2.6	1.2	2.6	.8	2.3	1.9	1.6
Ac	1.2	1.9	3.1	1.9	4.3	3.2	2.1	2.6	2.1	2.5
St	.4	2.4	1.6	4.1	3.3	3.3	2.3	1.8	2.7	2.4
Friendly										
Group										
Welfare										
Ad	1.0	1.6	1.3	3.5	3.2	2.4	1.9	1.9	2.3	2.1
Ac	.9	3.3	2.2	2.4	2.3	3.2	2.2	1.8	4.5	2.5
St	.3	2.1	2.3	2.8	1.4	2.9	2.0	1.8	2.4	2.0
Independent										
Scientific										
Ad	.4	.6	.9	1.6	.7	1.3	.8	1.4	.9	1.0
Ac	.5	2.1	2.4	3.2	3.1	2.0	3.4	3.8	2.3	2.5
St	.5	.7	3.0	1.9	2.8	2.9	2.8	2.4	3.0	2.2

TABLE 6 (Cont'd.)

RANGE OF MEANS ACROSS ACADEMIC SUBGROUPS, WITHIN EACH OF
THE NINE COLLEGES, FOR ADMINISTRATIVE, ACADEMIC, AND
STUDENT AREAS

	Colleges									Average Range	
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9		
Practical Status- Oriented	Ad	1.4	1.2	1.3	1.2	1.7	1.9	1.8	1.3	.6	1.4
	Ac	1.2	2.3	2.0	2.0	1.5	3.7	2.3	1.8	2.3	2.1
	St	1.1	2.7	2.4	2.7	1.7	3.0	2.5	1.8	2.6	2.3
Average Range	Ad	.8	1.3	1.1	2.2	1.7	2.1	1.4	1.7	1.4	1.5
	Ac	1.0	2.4	2.4	2.4	2.8	3.0	2.5	2.5	2.8	2.4
	St	.6	2.0	2.3	2.9	2.3	3.0	2.4	2.0	2.7	2.2

TABLE 7

SUMMARY OF RANGE OF SUBGROUP MEANS WITHIN EACH OF THE
NINE COLLEGES, AND BETWEEN COLLEGES

College	Intellectual Humanistic Esthetic			Friendly Group Welfare			Independent Scientific			Practical Status- Oriented		
	Hi	Lo	Range	Hi	Lo	Range	Hi	Lo	Range	Hi	Lo	Range
Number 1	13.4	11.0	2.4	9.1	5.9	3.2	10.8	6.6	4.2	3.4	.9	2.5
Number 2	13.0	10.3	2.7	9.9	5.9	4.0	12.3	9.3	3.0	5.3	2.2	3.1
Number 3	13.6	10.2	3.4	11.5	6.6	4.9	11.4	6.8	4.6	4.6	2.1	2.5
Number 4	12.4	7.3	5.1	14.1	8.7	5.4	9.4	3.9	5.5	9.7	6.3	3.4
Number 5	11.1	5.6	5.5	12.5	8.7	3.8	8.8	2.9	5.9	11.1	7.3	3.8
Number 6	9.8	4.4	5.4	12.3	7.4	4.9	9.4	4.5	4.9	11.0	7.0	4.0
Number 7	8.9	5.5	3.4	11.0	7.1	3.9	9.5	5.6	3.9	12.3	8.2	4.1
Number 8	10.2	6.8	3.4	11.0	6.7	4.3	10.6	5.2	5.4	10.0	7.7	2.3
Number 9	9.3	5.7	3.6	11.4	6.4	5.0	9.2	6.0	3.2	11.0	6.8	4.2
Average Range Within Colleges			(3.9)			(4.4)			(4.5)			(3.3)
Differences Between Colleges	13.6	4.4	(9.2)	14.1	5.9	(8.2)	12.3	2.9	(9.4)	12.3	.9	(11.4)

TABLE 8

SUMMARY OF RELATIVE SOURCES OF EMPHASIS TOWARD EACH
OF THE FOUR MAJOR DIRECTIONS - BASED ON DIFFERENCES
BETWEEN THE WEIGHTED MEANS ACROSS SUBGROUPS
FOR EACH SOURCE

College Direction of Emphasis	Relative Emphasis		
	Administrative vs Academic	Administrative vs Student	Academic vs Student
No. 1 Intellectual, Humanistic, Esthetic	*(ad) .9	*(ad)2.0	(ac)1.1
Friendly, Group Welfare	1.8(ac)	*(ad) .7	*(ac)2.5
Independent, Scientific	.3(ac)	*(ad)3.4	*(ac)3.7
Practical, Status-Oriented	(ad)1.3	(ad) .0	1.3(st)
No. 2 Intellectual, Humanistic, Esthetic	.2(ac)	.3(st)*	.1(st)*
Friendly, Group Welfare	1.7(ac)	2.2(st)	.5(st)
Independent, Scientific	.7(ac)	*(ad) .7	(ac)1.4
Practical, Status-Oriented	(ad)1.0	*(ad) .9	.1(st)
No. 3 Intellectual, Humanistic, Esthetic	*(ad)1.8	(ad)1.5	.3(st)*
Friendly, Group Welfare	3.3(ac)*	1.9(st)	*(ac)1.4
Independent, Scientific	(ad) .4	(ad)2.3	(ac)1.9
Practical, Status-Oriented	.6(ac)*	.8(st)	.2(st)
No. 4 Intellectual, Humtanistic, Esthetic	1.2(ac)*	1.5(st)*	.3(st)*
Friendly, Group Welfare	.2(ac)*	2.1(st)	1.9(st)*
Independent, Scientific	.3(ac)	(ad)2.6	*(ac)2.9
Practical, Status-Oriented	(ad) .6	.1(st)	.7(st)
No. 5 Intellectual, Humanistic, Esthetic	1.7(ac)*	(ad) .5	*(ac)2.2
Friendly, Group Welfare	*(ad) .7	*(ad) .1	.6(st)
Independent, Scientific	1.9(ac)*	(ad)1.9	*(ac)3.8
Practical, Status-Oriented	(ad)1.3	1.1(st)	2.4(st)*

TABLE 8 (Cont'd.)

SUMMARY OF RELATIVE SOURCES OF EMPHASIS TOWARD EACH
OF THE FOUR MAJOR DIRECTIONS - BASED ON DIFFERENCES
BETWEEN THE WEIGHTED MEANS ACROSS SUBGROUPS
FOR EACH SOURCE

College Direction of Emphasis	Relative Emphasis		
	Administrative	Administrative	Academic
	vs Academic	vs Student	vs Student
No. 6 Intellectual, Humanistic, Esthetic	. 2(ac)	*(ad) 1. 9	*(ac) 2. 1
Friendly, Group Welfare	1. 0(ac)	1. 8(st)	. 8(st)
Independent, Scientific	*(ad) 1. 6	*(ad) 3. 0	(ac) 1. 4
Practical, Status-Oriented	1. 2(ac)*	. 7(st)	*(ac) . 5
No. 7 Intellectual, Humanistic, Esthetic	. 8(ac)	(ad) . 8	(ac) 1. 6
Friendly, Group Welfare	. 8(ac)	2. 0(st)	1. 2(st)
Independent, Scientific	. 5(ac)	*(ad) . 0	*(ac) . 5
Practical, Status-Oriented (ad)	. 5	1. 1(st)	1. 6(st)
No. 8 Intellectual, Humanistic, Esthetic	(ad) 1. 0	(ad) 1. 8	(ac) . 8
Friendly, Group Welfare	. 8(ac)	2. 5(st)	1. 7(st)
Independent, Scientific	*(ad) 2. 4	(ad) 2. 6	*(ac) . 2
Practical, Status-Oriented (ad)	. 1	(ad) . 0	. 1(st)
No. 9 Intellectual, Humanistic, Esthetic	. 7(ac)	(ad) 1. 0	(ac) 1. 7
Friendly, Group Welfare	1. 4(ac)	2. 7(st)*	1. 3(st)
Independent, Scientific	*(ad) 1. 4	(ad) 1. 5	*(ac) . 1
Practical, Status-Oriented	*(ad) 1. 8	(ad) . 3	1. 5(st)

With respect to the scientific-independent emphasis, the administrative and academic communities do not differ from one another, but both are stronger in this influence than is the student community. Again, with respect to the friendly, group welfare variable, the push in this direction comes more strongly from the administrative and academic sources than from the student sources.

College No. 1 is dominantly characterized by its high intellectual-humanistic-esthetic emphasis and this is owing more to pressures from administrative sources than to student or academic sources. Both administrative and academic sources, however, appear to be pushing (more than student sources) toward a scientific-independent emphasis and also toward trying to develop a greater sense of group welfare in the college community.

College No. 2, also dominantly characterized by its high intellectual-humanistic-esthetic emphasis, differs from College No. 1 in the interaction of administrative, academic, and student sources of this emphasis. Here the intellectual-humanistic-esthetic characteristics of the school reside more numerously in the student community than in either the academic or administrative communities.

In College No. 3 the pattern of interaction differs from that in Colleges No. 1 and No. 2, yet its dominant characteristic is also its high emphasis in the intellectual-humanistic-esthetic direction. Here, this dominant direction of emphasis is owing more to the administrative community than to the academic, and more to the student community than to the academic. The academic community, more than either the administrative or student areas, appears to be relatively stronger in contributing to a friendly, group welfare emphasis in the college.

A LIBERAL ARTS COLLEGE EXAMINED

The case of College No. 5 is interesting in several respects and may be used as a fuller illustration of what can be deduced about a college environment from an analysis of students' responses to the CCA, drawing for this purpose on the previously presented tables relating to College No. 5 (Tables 2, 3) as well as on Table 8.

The relative interactions of its administrative, academic, and student segments, as shown in Table 8, suggest that its academic community is often at odds with both its administrative and student communities. The emphasis in an intellectual-humanistic-esthetic direction comes more strongly from the academic area than from either the administrative or

student areas. Exactly the same situation is true of the scientific-independent emphasis. In both these aspects the administrative and student areas do not differ from one another; thus, the academic community carries the burden of emphasis in these intellectual directions, and with less support from administrative or student features of the college than is typical in the group of nine colleges reported here. The main push from the student area (relative to other areas) is in the practical, status-oriented direction; and the main push from the administrative area is toward the friendly, group welfare characteristics of the campus.

Although it is almost entirely a liberal arts school, of moderate size, there is considerable diversity among its various academic subgroups. As Table 2 indicates, the subgroup of Education students is least aware of academic intellectual pressures and more aware of practical status-oriented features. The college as a whole is dominantly characterized by its spirit of friendliness and concern for group welfare, although less of this emphasis is perceived by students in the physical and biological sciences than by the students in English and languages.

The measurement of emphasis coming from the student community will, of course, be the same for the college as a whole no matter how the subgroups are determined, but the differences that may exist between various subgroups will clearly depend on how the subgroups are selected. In all of the present analyses, the subgroups are selected by academic fields. Thus, the emphasis from the student community as reported by psychology students comes from whatever assortment of students the people in psychology had in mind when they answered the questions. These may or may not be other psychology students. In any college, and perhaps in most, the circle of friends one has, and is presumably most influenced by, may be determined less from sharing a common major field than from other factors. Alternative ways of grouping the students have not yet been explored in all of the nine colleges. In College No. 5, however, it was apparent from reading the students' answer sheets that, most typically, the reference group for responding to items about the student community was the fraternity or sorority or dormitory rather than the academic field. Accordingly, the responses were re-sorted by living centers and replies grouped in this way were compared with replies grouped by academic majors with reference to the characteristics ascribed to the student community. At the same time, in order to provide some further estimate of the reliability of differences between various academic subgroups, the responses from the college were put into random groups. The results are shown in Table 9. First of all, it is clear that the variability produced by random groups is in no instance statistically significant. Second, it may be noted that the variability produced by academic groups is on the average twice as large as the random variability. Third, with

TABLE 9

COLLEGE NO. 5: COMPARISON ON THE RANGE OF MEAN SCORES
OBTAINED BY RANDOM GROUPS, ACADEMIC MAJORS, AND
STUDENT LIVING CENTERS

	Administrative		Academic		Student		
	<u>Random Majors</u>		<u>Random Majors</u>		<u>Random Majors</u>		<u>Living Centers</u>
Intellectual Humanistic Esthetic	1.4	1.2	1.3	4.3	1.6	3.3	4.1
Friendly Group Welfare	.7	3.2	1.0	2.3	.7	1.4	3.3
Independent Scientific	.9	.7	.9	3.1	1.1	2.8	3.6
Practical Status- Oriented	.5	1.7	1.7	1.5	.9	1.7	3.2
Average	.9	1.7	1.2	2.8	1.1	2.3	3.6

respect to the student area, the variability produced by sorting students according to living centers is three times as great as that produced by random groupings.

College No. 5, then, appears to be one in which the student community is much more clearly grouped around fraternities and sororities than around academic fields. The practical, status-oriented emphasis in the environment comes much more strongly from the student community than from the academic community. Indeed, the intellectual emphasis in the academic community gains relatively less support from the student or the administrative communities than is the case in any of the other eight colleges studied thus far. If College No. 5 wished to strengthen the intellectual emphasis in its environment as a whole it might profitably begin by examining the administrative attitudes and actions and the features of student life which are not presently supportive of such an emphasis.

SUMMARY

A college environment may be most effective when all of its parts exemplify and press toward a consistent set of objectives. The present report has described a potentially fruitful way of testing this hypothesis. For the moment all that can be said is that colleges differ from one another in the degree to which their environments are homogeneous. These differences have some relationship to the size and complexity of the institution, but the magnitude of this relationship is described by a correlation of about .50 which still leaves ample room for exceptions to the general trend, for some moderate-sized schools are less homogeneous than some much larger schools. Clearly in most schools, students in different programs or major fields are exposed to different pressures. Clearly also, in most schools, the academic, student, and administrative aspects of the environment, as defined in this study, often differ from one another in the degree to which they exemplify similar objectives. By understanding more fully how well its various parts work together, an institution should be able to reduce the dissonance it does not mean to have and thereby increase its effectiveness in accomplishing what it most truly means to accomplish.

ADMINISTERING STUDIES OF CAMPUS CULTURES

Theodore M. Newcomb, Professor of Psychology and Sociology
University of Michigan

As you have been told, I have been studying campus cultures in one way or another for nearly 30 years off and on, and have devoted much time to it. Now, at this late date, I discover, like Moliere's M. Jourdain what I have been doing all my life. I have been a research administrator; I didn't know that until I was asked to talk on this topic.

I don't think I really know what any of the textbooks say is meant by "administration" but I will tell you the sense in which I am going to use it today. I shall refer to any kind of arrangements that can be made by researchers -- with regard either to planning or to execution -- any arrangements that affect the outcome of the study, excepting only those that have to do strictly with the selection of a problem and the research design for that problem. I don't suppose any questions about research design will come up this morning; I don't intend to talk about them. I might tell you what I mean by that. Research design simply has to do with whatever is necessary to plan in order to get the data that you need, in order to answer your questions, to make inferences from your data that are relevant to your problem. This is not my concern today. I will assume that the selection of the study and the nature of the research design have already been completed, and for this reason I shall mean by administration any arrangements of planning or of execution, excepting these of selecting the study and research design, that affect the outcome of the study in any way. The effects may be direct or indirect, they may be intentional or not, the effects may be desirable or undesirable; but all of these kinds of arrangements I shall include under the term "administration." In case you think that covers a good deal, I suppose you are right, but I don't know how to make any lesser distinction between this field and the rest of the problem.

I remember two men, older or at any rate wiser than I, who have at various times made illuminating comments on this general subject. One of them is Dr. Dana Farnsworth, who is the psychiatrist in charge of student health at Harvard and who has been in nominal and administrative charge of a study of student development that has been going on there

for three or four years. At an Andover Conference on the Study of Student Development some years ago he made some fascinating remarks -- which, by the way, I find are not excerpted in the report of that conference which was handed out to you. His remarks were entitled, or might have been entitled, "Nineteen Kinds of Mistakes Not to Make in Carrying Out Student Research and How I Have Made Them All." Being less modest than Dr. Farnsworth, I shall not concentrate on my own mistakes; I hope to be able to take advantage of some of his mistakes too. But you are free to make your own inferences about the 19 or more mistakes that I have made.

The other quote memorable to me comes, as it happens, from another psychiatrist: Dr. A. T. M. Wilson, who for many years was in charge of The Tavistock Institute of Human Relations in London, England. He long ago concluded that the study of individual organization and individual disturbance, which is the province of psychologists, was far too tame and unimportant for him and he went into the study of groups and institutions. He, in connection with Eric Trist and other people, founded the Institute very soon after World War II. At one time I worked with him, and very soon betrayed my innocence in various ways. "You people," he used to say -- and I think by "you people" he meant academics who get a notion in their head as to some research that needs to be carried on and then push their way through whatever has to be done to get the data -- "You people remind me of a surgeon who is out walking one evening in Piccadilly Circus and suddenly stops a man on the sidewalk, buttonholes him, and says, 'Pardon me, sir, do you mind if I rip open your abdomen in the interest of science?' Well, you people, especially if you are studying groups, are very much like that. Your notion of what you want to do is to justify everything in terms of science and if it happens to rip open some organizational abdomen this is the last thing that ever occurs to you in advance."

Well, the fact that I remember this comment ten years later indicates that how right I think he was. And perhaps much of what I am about to say could be sub-titled "How Not to Rip Open Other People's Abdomens."

I am going to start out with some initial questions that I think any researcher of campuses ought to ask himself before he even starts -- I might say before he even begins to start. Assuming again that the research problem itself has been previously defined, I think the first question one needs to ask oneself is: What groups or individuals may be affected by the research that I propose to carry out? Or in a still more extended sense: What groups or individuals may think they are going to be affected or might at some future time think they are being affected by the

research that I propose to do? There are many kinds of groups in colleges and universities and many kinds of individuals who may in fact be affected or who may think they are threatened in one way or another by what you want to do. They may be affected by the research process itself, the mere fact of gathering data, stopping people, making demands upon them, asking them certain kinds of questions, and so on. They may be threatened in a quite different way by the horrible consideration that perhaps these findings might lead to some application in their own college, that this application might change things from the way they are now -- and this, of course, might mean a change for the worse. There will be all kinds of people affected in various different ways. At any rate, the first question I think should be this one: What kinds of groups or individuals may be affected or may believe that they may be affected?

Then, one needs to go on from there and ask: What kinds of participation, help, and support will the completion of your research make demands upon? What kinds of demands are going to be made upon what kinds of people if the project is to be successfully carried through? I think of three different kinds of demands -- in a very broad category, but representing kinds of problems I have faced myself.

There will be a problem at the very least of neutralizing the potential antagonism of certain individuals or certain groups. Somebody mentioned yesterday the "two cultures" problems which exist on a campus, particularly the so-called humanist versus the scientist. I have never in all my life failed to find some important group which took the position that by studying people you are likely to damage them. The mere fact of looking inside their abdomens, so to speak, is going to do something dangerous. This is an assumption which I don't share but which I think I reasonably well understand by now: that human values (and after all colleges and universities are concerned with human values) are precious, intangible, and spiritual, and by definition cannot be quantified; if you attempt to quantify them you will either distort or you will disturb them, and in either case let's have none of it. This problem may or may not arise in a particular case and I'm simply saying that in the first place one of the demands that you will have to make of other people is that they will tolerate the sort of thing that you do even though you know perfectly well you can never expect their enthusiastic support.

A second kind of demand that you're going to have to make is that you will need actual help from a great many people. The more extensive the research, the wider the range of people from whom you will need help. It is quite likely that you will need help at rather high administrative levels. You will need help from colleagues, you will need help from janitors, you will need help from faculty members in some way, you

will need help, heaven knows, from research assistants. It isn't likely that you are going to do all the work yourself. This will make various kinds of demands upon various kinds of people.

Then there's the third kind of help which your study may or may not lead to. This third kind should never be excluded from possibilities even though it may never actually come into effect. It is the application of one's findings, or certain aspects of one's findings, to one's own campus. The reason I say this should never be lost sight of is that I think there is a very considerable advantage in keeping open the possibility that one's own studies may conceivably lead to certain improvements on one's own campus. Until recently I happened to treat most of my own studies as what I would call "pure" or "basic" concerns. I think I've made some mistakes by not recognizing the fact that other people were concerned whether or not I was interested in implications of these findings to the local scene. Furthermore, I think it helps to get involvement on the part of others. If one faces quite frankly the fact that there may be applications then I think one needs to make it clear that one is not undertaking this research in the first place just in order to justify one's own pet ideas as to how this particular campus needs to be changed. But, on the other hand, if it's frankly recognized at the outset that some findings may be such as to arouse the interest of some people in making local changes, so much the better, I think.

Of these three kinds of demands that I have noted -- mere neutralization of potential opposition, actual help and involvement in terms of study, and future application of problems -- I think the easiest is actual help and involvement pertaining to the study. Incidentally, as many of you would agree, I think, one very good way to neutralize opposition is to get people involved. People so often want to help. I've never found this a very serious difficulty and so I mention this as the least difficult of all of them: simply getting the help and involvement of other people in carrying it on. The hardest of the three, I think, is neutralizing potential or even open opposition. I often feel that I've never had much influence with my own colleagues. I must be a "cosmopolitan," I guess, because I find that at a distance some of my stuff even gets read. But influence with one's own colleagues is something else again, and I would say that of the three this is perhaps the most difficult problem to solve.

A third kind of question which one needs to ask in advance, before one even begins to get started, has to do with the several steps one will have to follow in completing a study. I've divided these into five categories but you can make your own division. I've labeled them respectively pre-launching, actual planning, execution, feedback and application.

By "pre-launching" I mean steps that are necessary before it is even decided to undertake the study. If you will pardon my being autobiographical, let me give you an incident. Three or four years ago I was approached by the representative of a very large granting agency which happened to be interested in student development and was asked if I would submit a proposal which would run well up into six figures for a study of student development at my own university. I just barely had the wit to call together some of my colleagues with this foundation representative; while I was interested I certainly didn't want to commit us prematurely. So we had a two- or three-hour session, half a dozen of my colleagues and I together with him, as the result of which we answered "no." We would not submit a proposal for a study like this, simply for the reason that we didn't know whether it would be feasible at our university or not. We had begun to ask ourselves some of these questions that I have already indicated: who else is going to be involved, what demands are we going to have to make upon them, are we ready to make these demands, are we sure we can get the necessary support that we want? And we all concluded that we weren't sure enough at that time. We made a counter-proposal that they allow us to submit a request for a very small planning study and to our consternation we were told that there was simply no mechanism by which the foundation could make a small grant! I don't want to distort things; it wasn't the size of the thing that forced them to say "no." There simply was no mechanism at that time in the foundation for supporting planning studies. So we said "Thanks very much, nice to have known you," put him on the plane, and that was that. About a week later he called back and said he had found a mechanism. So we put in an application for a small planning study. Well, I mention this as an illustration that I happen to know about of some things that ought to be done and looked at and considered even before you begin to plan. I'm quite sure you won't be surprised when I tell you that after a year's work, much of which was devoted to sounding out various kinds of people who would necessarily be involved, we did come to a conclusion that it was feasible.

Well, these are pre-launching kinds of activity. There are questions even before one gets started, I think, about what the public's image of this study is going to be. When I say "the public," I should note that even a small college has more than one public; I should say "publics." Who do they think is running the study, anyway? For whose aggrandizement? Whose toes are going to get stepped on? Sooner or later the question of publicity will come up. If, as we do, you have an enterprising, not to say aggressive student newspaper, you will know that student newspapermen are just like their elders: All potential news is gravy and they are concerned with news but they are not necessarily

concerned with what you or I think is good for the colleges and universities. These kinds of questions will come up. At any rate, there are all kinds of problems which I think should be labeled pre-launching problems. And only after some of those have been considered could you go on to the stage of actual planning.

At the actual planning stage, the people you will want to consult are the people whose help you will definitely need and the people upon whose toes you might find yourself treading. I shall come back more specifically to some of these points in later illustrations. The first stage of execution is one in which you will find yourself calling upon administrators -- in my case, at very high levels and very low levels -- upon colleagues, upon research assistants, and, let us not forget, upon the students whom you are studying. I'll have more to say about that later. The fourth step is that of feedback; it involves at least two kinds of things. It is simply not possible to exaggerate the importance of this, and yet there's a built-in dilemma about it. If one is making demands upon people and if one expects to keep decent and proper communication lines open, one can hardly fail to report what is going on. At any rate, this feedback is of two kinds, one of which comes earlier than the other. First, it is a continual progress report: what's going on, how well are things going, what were yesterday's problems, what tomorrow's problems will be. The other kinds of feedback, of course, have to do with the actual findings. These tend to come later. There's a very special problem here because, as important as feedback is, there is constant turn-over of personnel in colleges and universities. It's very regular and dependable on the part of students, less regular and dependable on the part of administrative and faculty associates, but both of these things mean that feedback of both kinds has to be as continual as you can make it. Sometimes it is rather discouraging. In our case at Michigan, for example, we have a very special and helpful student advisory committee for research -- but, alas, you get them informed and useful and then the better ones graduate. Then you start over again the next fall. I know of no way of avoiding this particular difficulty.

Finally, at the stage of application I am going to have relatively little to say, partly because my own experience with the concrete application of my own research findings is very limited. I think the only important thing I really have to say about the application of findings today is that one should always keep open the possibility that this may occur.

From here on, I should like to be extremely informal and just tell you about some experiences I've had -- good, bad and indifferent -- because I think that by illustrating these problems I can be more effective

than otherwise. Henceforth, I shall be in the main autobiographic and the remainder of my remarks might be entitled "My Misspent Life As a Researcher."

Almost 30 years ago, in 1934, as a matter of fact, I began to get curious about what was going on in a brand-new college to which I had just come -- Bennington College, then in only its third year. There was still not a senior class and I began to see unfolding before my eyes a unified, almost monolithic culture, the like of which I had never seen in any college or largish institution in my life. When I say "largish" I mean 250 students and 50 faculty members. Colleges that are brand-new are always somewhat atypical and therefore somewhat on the defensive from the outside. At any rate, there was unbounded enthusiasm, and much cohesiveness in this college, and as I say, I was deeply impressed by what seemed to be the unitary nature, the power of a single monolithic culture on the part of the students. This I decided to study. I am horrified now, looking back on how I did it.

Here's all I did, really. I decided within six months of going there that I had a nice problem and that since it was a small community I would get responses from 100 per cent of the students. I didn't ask anybody about it, I just decided that this was something I would like to do. (I did a little informal pre-testing; in fact, I did quite a bit of informal pre-testing. This, however, is on the techniques of research, which is not my problem today.) At any rate, with the early fall of 1935, when I determined to launch this study, all I did was solicit the help of the secretarial staff and get a questionnaire mimeographed. I put a copy of the questionnaire in every student's box with a little note saying this was a study for which I had the approval of the President. (I had gone to the President and asked if he minded.) I simply put in the questionnaire with a little covering letter to each student. You know, I got 80-odd per cent response by this simple device; but I wasn't at all satisfied with 80 per cent. So, very soon, I discovered that I was expecting a lot of the students. Some of them told me they didn't like it, and one or two even took the trouble to write and ask what right I had to interfere in their lives. I thereupon made some inquiries and arranged a meeting with the student presidents of the houses. There were 12 houses of about 20 students apiece -- lovely houses, incidentally -- and so I called the presidents of these houses together and humbled myself and asked their advice as to the best way of pursuing this. What mistakes had I already made, if any? In effect, they said, "Look, why don't you just let us handle this for you? Just give us as many questionnaires as there are students in our houses, we will pass them out, you can arrange for some device so that the other students won't see them, and we don't see them. We don't want to see them. We'll pass them out and we'll get

them back. We're probably in a better position to ride herd on delinquents than you are." So from then on that's the way we did it. With very few exceptions it worked beautifully. There were several occasions in which I got 100 per cent response except for one or two students who were ill and in the infirmary or something like that.

This was my baptism in this kind of thing. I'll tell you another way in which life was simple in those days. For two years Mrs. Newcomb and I did all the work that had to be done on the study except, as I say, for the presidents of the student houses. Along the way it began to be a little overwhelming and I decided I really had to have some help. There wasn't any such help locally, so I made bold and took all my courage in my hand and wrote a little letter to the Social Science Research Council, which at that time had a policy of grants-in-aid for research already begun but not yet completed. To my enormous delight I got a reply granting my request, and I received \$700 for that year's study; a year later I got \$800. All I had to do was write two letters, as a result of which I got \$1500, and that was all the financial aid I ever needed. Them days is gone. I am not so sure in this respect that such a procedure was totally inappropriate under these conditions, but it was certainly informal and careless.

Now, by way of contrast, let me describe a whole series of steps that my colleagues and I have taken in a much more ambitious study currently going on at the University of Michigan. I will add that in order to get support for this study I had to do more than write a little one-page letter to a granting agency. I sometimes feel I more than earn any grant I ever get just by the procedure of making requests and filling out the proper forms, documentation, and so on.

At any rate, this is the current Michigan project. I think I'd better take one moment to describe its objectives, so that I can be better understood when I describe the steps we've taken. We are studying student experiences as related to college outcomes. We view student experience both as caused, that is as having antecedent conditions, and as having consequences. Student experiences have to do with individuals' characteristics and also with institutional characteristics of the universities; these two things together, as we visualize things, determine the nature of experiences that students have. By the way, these are not independent. The nature of the university has a great deal to do with such things as what kinds of students come there in the first place. The consequences which we're interested in are outcomes of a wide variety of experiences. Some of them we like to conceptualize under Eric Erikson's rubric of identity formation, which covers a lot of things: vocational, heterosexual value development, and views about the kinds of

niches which the world offers to fit the student's interests and capacities into. That's what the study is all about, in very general terms.

Now I'm going to select a few illustrations from all of these steps that I've already outlined and tell you some problems which we did or did not do something about. The first question I suggested was "Who is likely to be involved or affected by the research?" Since this was rather an ambitious research project and since we knew it was going to involve all kinds of university procedures, we had several conferences with the vice-president for student affairs. He in turn took us to all kinds of people, many of whom I didn't know existed before. (After all, I'm a school teacher and I beat a little path from laboratory to office to home, and that's my life. Anyway I began to discover what the university administration was like.) These were people like the admissions officers, the academic counsellors, the office in charge of freshman orientation, and so on. We decided rather early in the game that we would limit our study to the Arts College which has by far the largest concentration of undergraduates and which is divergent enough and large enough to study in itself. Naturally we talked to the dean of the Arts College. He immediately suggested that we come in and make a rather detailed presentation to the executive committee of the College. They raised questions about the faculty as a body, since this was a study of the Arts College. What were we going to do about the faculty? It was decided that a brief presentation should be made at a forthcoming faculty meeting and that it would be a very good idea to have a faculty advisory committee set up; all of this was done.

We took pains to appoint to the faculty advisory committee just as many non-social scientists as social scientists. While we picked these with some care I think this was one of the wisest decisions we ever made -- not so much because they were "neutralized" as because they turned out to be awfully helpful. Once their suspicions were allayed, a professor of classics, a professor of linguistics and a professor of mathematics, for example, made more new suggestions than either of the social scientists did. I am quite sure that there is still a good deal of unallayed suspicion or misgiving on the part of many faculty people. I think that all we can really do about this is to let it be perfectly clear that things have gone through channels, that anything we are going to do has been approved by the democratically elected executive committee of the College, and that we do have an advisory committee including a good many "humanists" on whom we depend to a considerable extent.

All of these same steps had to be gone through with the students. As I said, we had our apprehensions about the student newspaper. Its

staff members were powerful, very bright, and well informed. But they were not particularly sensitive to needs for judicious timing in making announcements, or for announcing them in one way rather than another. One of the wisest things we ever did, I think, was to assign one of our graduate student assistants full time to the newspaper. His only instructions were to find out what was going on there, to be an informant to them, and in case of emergency to report back to us. Our whole research staff spent a long evening with the entire senior staff of the newspaper, some 20 people. They quizzed us hard, closely and fairly. And this was very useful, I think; they gave us some very good ideas and indicated their willingness not to make premature announcements. The next question was what other important student organizations there were, and another graduate student assistant was assigned the job of getting acquainted with the fraternities and sororities. These are not as numerous or powerful at Michigan as they are in many places, but there are enough of them to exert considerable influence. We did similar things with the student government organization in the dormitories and with a few other organizations. Among all of these other organizations we created a student advisory committee and we really used them. We asked such questions as "How are students going to react to this? What's wrong with it?"

Well, I see that I have mixed up my stages. We foresaw that we would be involved in research that we wanted to do and many of the steps which I have just been describing did not in fact occur until well along in our early research.

Let me say a few more things now about what I referred to before as the pre-launching, before we actually get into data-gathering. I told you that we consulted the administration in various ways, not excluding the President of the University. One interesting question that came up here was raised, I believe, by the President. He said "Well, we think it's wonderful you're going to do this research. We hope you get the money. But what commitment is this going to involve us in later on? Things have a way of leading to other things. What commitment is this going to involve us in?" We were ready for this question and we told him that among other things we hoped it would lead to a commitment to continue the research after the grant from outside sources had come to an end. I remember asking him if he knew of any successful, self-respecting, commercial organization which spent exactly zero per cent of its funds studying its own processes and its own product. He said "Of course not," and we readily agreed about the anomaly of an organization which prides itself on research (the local saying in Ann Arbor is that it is "the research center of the Midwest") but which doesn't put a nickel into a study of its own product. Because the University is sensitive to such considerations, it is likely that some parts of our

research will continue after the termination of our outside grant, being supported by University funds.

I might add that there was another little problem, which won't surprise some of you, which we had to ask in the very early stages: Is there space to do the kinds of things we want to do? At one time we were about ready to get out of business because there didn't seem to be any space. Somehow you always find it. (We have a small research center at the University in which the members swear they do their work in a hall closet and two bathrooms because there isn't any other space. I don't know how literally true it is.)

Let me turn now to some problems that I would think are administrative that have to do with the execution of the study. I have already indicated that we are interested among other things in finding out the characteristics of students on their first arrival at the college. And the question arises here as to what kinds of students apply and what kinds of students don't. Among those who apply, what kinds are accepted and what kinds are not? Among those who are accepted, what kinds come and what kinds don't? The basic reason for asking these questions is simply so that we can understand what kind of experiences happen with what subsequent consequences; it is necessary to have full data on the initial characteristics. Following conversations with the admissions and orientation officers, it turned out to be possible for literally 100 per cent of all freshmen and all transfer students to provide the necessary data, simply as part of the orientation process. At Michigan most of our orienting is done during the summer; about two-thirds of our freshmen and transfer students come for two- or three-day periods all summer long and by mid-September most of them have been through the orientation process. The remaining third comes all at once four or five days before the opening of the fall session. Well, we have two to three hours of time for the orientation program and we have had not the slightest difficulty in getting 99.8 per cent of all freshmen to respond to our questionnaire. In addition, we take a good deal of pains in making announcements to the freshmen as they respond to these tests and questionnaires. We decided to indicate quite clearly that this was part of a research project and not part of the routine testing program of the University. We made this decision partly because we want them to know that many of them are going to be followed up in later years. We want them to know that it's altogether unlikely that they individually will get any help from this study. We have lively hopes that their successors, or maybe their children when they come to the University, will find that certain improvements have been made as a result of it.

We also thought at the outset of our study that we would like to get

100 per cent of the graduating class. We gave up that idea, for a lot of reasons. In the first place, compared to freshmen, seniors just are not so malleable, so pliable, so obliging. This is a point where our student advisory committee, many of whom were seniors, helped us enormously. And while they tolerated for a while the idea that it might be possible, they eventually urged us, quite unanimously, just to give it up. One of them said, "Look, I thought you social scientists had some sampling devices that maybe you could use on occasions like this. Why do you need 100 per cent?" So we have relied on sampling, although we had special reasons for wanting 100 per cent, because there isn't any way of doing it. We could, if we had wanted to, have dismissed all classes in the College, say, from 10 to 12 on a certain Thursday -- but there still would have been no way of making all students come, and many of them would have resented the coercion involved. So we just gave it up.

What we have done instead is, for all practical purposes, just as good -- in some ways better, I think. We have decided to sample certain kinds of sub-populations and also to sample individuals. We thought we would be able to get a pretty reliable sample of each senior class by the following devices: We sampled residential units, obtaining 100 per cent response from the units selected. The reason this is feasible is that you can work individually with the president or leading representatives of these groups and get cooperation from them. We are following precisely the same policy with student organizations: taking a very few student organizations and getting 100 per cent of their members. But then there still is a very large population, especially of upper-classmen, who are allowed to make their own arrangements for living. Most of them live in private houses, apartments, etc., in ones and twos and threes and fours. In order to sample them, we take advantage of the fact that we have on campus a very skillful and sophisticated research outfit known as the Survey Research Center. We get a total list of all the people in the College who live in private homes of one sort or another, take every n th name, hire the Survey Research Center staff to find out where they are and to interview them, much as Dr. Gallup does. I don't mean this ends all our problems, but at our university apparently it can be done in this particular way.

How about feedback? As I have said, feedback involves not only reporting what the findings are; in our study there really aren't any yet, since it has been going only a year. It involves, much more importantly, current reports about how things are going, what difficulties we're having, what upcoming problems there are, and so on. With the advisory committees we consider our feedback problem is to keep them up to date and to consult them about upcoming problems. As for feedback to the research subjects themselves, there isn't much we can do about this

except make a promise, which we have done, that anybody who would like to have a brief, mimeographed report five years hence can have it by indicating now that he wants it. Many of them will forget it, but at any rate we shall five years hence have some findings and they will get them.

A more difficult question has to do with the application of research findings. I guess the only important thing to say about it at this moment is that we have taken pains to build in from the outset the possibility that there will be research application.

By the way -- and this is in an indirect sense an outcome of this research project -- the College has decided that next year as an exploratory venture it will set aside two student houses which are parts of dormitories to begin an experiment, or should I say a demonstration, in closer articulation between residential arrangements and academic arrangements. In these student houses, one of men and one of women, the students will number about 200, including some upperclassmen. Freshmen in these houses will take most of their courses in sections that are aside for them as members of these particular houses. Some of the teaching will be done in the houses and there will be specially assigned faculty affiliates and tutors. This proposal, which is quite informal and is designed as an exploratory demonstration only, is seriously thought of as a possible solution to our upcoming problems of increasing size. If it should be possible to counter some of the increasing anonymity that goes with increasing size by breaking down colleges into smaller units, residentially based in one way or another, we want to be ready by having done some advance work.

The connection between this last exploration and the more inclusive research proposal I have been talking about is simply this: The proposal came out of the fact that research is being done. We have already found that there are considerable and enormous differences among certain living groups as to the apparent impact that intellectual and academic influences of the college have had upon them. At any rate, this way of applying certain research findings was the direct outcome, even in the first stage of the game, of our research project.

I think my final words would be as simple as the following: In my experience there is almost a formula for what one needs to be and do to avoid the problem of ripping open people's abdomens needlessly in the interests of science. One needs in the first place to have foresight, and one can't possibly just sit down in a chair and get all this foresight by thinking hard. One needs to consult people who have been through it before. The research that is published, I suppose

because there is a premium on printing space, rarely discusses any of these administrative mistakes that are made. One has to get them by feel -- pick them up out of the gutter, so to speak; you can't find them in the Journal of Abnormal and Social Psychology. At any rate, one needs to have foresight about all manner of problems and to be imaginative about them. One needs to employ a good deal of thoughtful consideration; after all, you are affecting other people's lives. One needs above everything else to take the role of the other; to foresee, to imagine, to understand how their lives are going to be affected. They have interest in these matters as well as you do, and sheer, simple consideration for their interest is perhaps the most important ingredient in the formula. Finally, I think, a dash of humility needs to be added in this recipe. It's easier for a man who has been doing such research for 30 years to talk about his own mistakes than it is for a younger person who is still in the midst of them. Well, I'm still in the midst of them too. What I mean by humility is simply that one's own objectives are not everything there is in the world, no matter how important they seem at the moment. One's own wisdom is not necessarily enough, great as one's own wisdom may be. Neither one's own objectives nor one's own wisdom is superordinate, necessarily, to those of others. When you need other people's help and when you are interfering with their lives in order to use their help for your own purposes, nothing will substitute, I think, for a dash of humility.

ADMINISTRATIVE IMPLICATIONS OF ANALYSES OF CAMPUS CULTURES

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I think we would all agree that there is an increasing volume of research in and about higher education. Indeed, this institute itself, others like it around the country, and the growing number of papers and monographs and research reports all attest to the fact that social scientists are beginning to study institutions of higher education with something like the close attention that they have given to primitive tribes, local neighborhoods, political parties and business organizations in the past. Many people now are doing the kind of thing that Theodore Newcomb did in lonely grandeur at Bennington College twenty-five years ago. Yet, for all the faint stirrings in the vineyards of research, there has been as yet very little use made by college and university administrators of the work of students of higher education. A lot of work is being done, but one is hard put to think of cases in which research in higher education has really had an impact on policy, really made a difference in some decision or other. And, before going on to suggest still more research on higher education, it might be worth pausing briefly to ask what I think are the prior questions: First, how can we account for the rapid growth of research in higher education over the past five or ten years? Second, why has this research had such small impact on educational practice? Or, more generally, what are some of the forces which encourage research in higher education but not its application? I would like to discuss these questions simultaneously, since they are in a curious way intertwined. Finally, I will point to one or two areas where I think research might have clear and direct relevance to educational decisions.

I

A number of factors affect the extent to which social science will be of use to educational practice, quite apart from the present, and I believe very temporary, scarcity of trained people working in the area. One of these is the manipulability of the variables that the social scientist studies. Herein lies the nub of the difference between pure and applied social research. Pure research in social science is concerned with

understanding and accounting for some phenomenon -- let us say, an anti-intellectual climate among students, or a relatively high rate of drop-outs in some group -- without much regard for whether anything can be done about it. Research that hopes to be of relevance to practice cannot take this detached view, but must pay special attention to those elements in the situation that can be purposefully modified by those who make policy for the organization. And in the study of colleges and universities, it is not always clear what elements in a situation can be modified, how effective those changes will be, or just what should be done to achieve the desired effects. When research does not suggest where the levers of action lie, or what will happen when they are pressed, the administrator may show interest in its findings, but he is less likely to see its relevance to his work as an administrator.

For example, to a very considerable degree the values and attitudes of college students are brought to college with them, are shaped largely by their life experience before coming to college, and are introduced into the college through the processes of student recruitment and admission. The connections between a student's social origins (which is simply a way of talking about distinct patterns of life experience) and his orientations to the college and to the education offered there can be shown in many ways. But all this appears to be of merely academic (i. e. , not practical) interest to the administrator, who certainly cannot affect the prior life experience of his students, and who may not be able to affect substantially the college's admissions policies. By contrast, the influence of the residence halls -- how they are organized and run -- on student attitudes and behavior may be relatively much less than the influence of pre-college experience. But residence halls are usually things the administrator can do something about; they are manipulable. And when the social scientists can say something concrete about the bearing of the residence halls on student life and the educational enterprise, then the administrator is more likely to pay real attention -- and, conceivably, even to make use of those findings in his policy planning.

The social scientist who wants his work to be relevant to educational practice has to be clear about two things: first, that it is what he can say about the manipulable variables that will be most directly useful to the administrator; second, and of equal importance, that the elements in the situation that can be manipulated may not be the most important in producing and sustaining the phenomena he is concerned with. In other words, he should beware of mistaking a set of policy recommendations for an adequate scientific interpretation of the matters he is studying.

II

This illustration brings us to another important element in the encounter between administrator and social scientist; namely, the administrator's scope for decision, what lies within his discretion, what can be done anything about. This varies greatly in different colleges and universities. In some, the administrators and faculty members have considerable freedom to modify parts of their educational practice; in others, the administrator's job is chiefly to keep things going pretty much as they are, with relatively little power to change anything. Where admissions policy, residence patterns, curriculum and so forth are set largely by outside agencies, or by unalterable doctrine or tradition, then none of the relevant variables that research may point to are manipulable; there are no levers of action, and the research cannot be relevant to a policy which nobody within the institution can modify. That, of course, sketches an extreme case, but a fair number of American colleges approximate it. Social science research on such a campus cannot be applied, because there is no one there able to apply it. If it is done at all -- and I suggest that the climate on such campuses will not be particularly hospitable to it -- then it will necessarily be pure, and its effects, if any, will be those of ideas in the world at large, working through the slow erosion of old assumptions and pieties.

The contrast between the situation where the administrator has a large amount of freedom of action and where he has almost none at all is clear enough. But the majority of cases lie somewhere in between. Typically, in American colleges and universities, power is distributed in extremely complicated, informal, and often invisible ways among the administrators, the faculty, the trustees, and various important constituents such as the alumni and the current body of parents. In such cases, the question of what is manipulable is itself highly problematic, at least as difficult to know as the patterns of student behavior which may be nominally the subject under investigation. Every organization is, to some extent, a polity, in which power is formally distributed and informally exercised, in which complex political processes determine who can initiate what events occur and who can veto them, and whose consent must be gained before policies are put into effect or sabotaged. Some studies of these internal organizational processes have been done within formally bureaucratic organizations, such as business firms, and within formally democratic organizations, such as trade unions and political parties. But almost nothing has been done by way of studying the political processes within the bewildering variety of institutions of higher education which are not quite bureaucratic, not quite democratic, and where the principles of hierarchy and collegiality are usually both present in varying and conflicting degrees.

In most American colleges, the power and influence of the chief administrative officer are conditioned by a host of factors including his relations with his trustees or with the legislature, and by the traditions of the college, as well as by his relations with segments of the faculty. His discretion is also affected by the distribution of power within the faculty, and its departments or divisions, which themselves vary internally all the way from iron dictatorships to New England town meetings.

What I am suggesting is not a design for the study of colleges as political structures, but rather that the relevance of social science to educational policy cannot be discussed without recognizing that policy recommendations are quickly transformed within colleges into political issues, and that the applied sociologist of education must be in part a political sociologist as well, or run the risk of being irrelevant. (It is not bad for research to be irrelevant to practice; it is only bad for what was meant to be applied research.)

The relevance to practice of research into some aspect of the life of a college -- for instance, the nature of student subcultures -- is then affected not merely by what forces are formally within the discretion of the institution to modify, but also by what support there will be or can be mustered for a given proposal within the politically important groups that have an interest in the policy. Reports and recommendations that ignore this dictum end up gathering dust on back shelves in the library or the president's office.

III

The general principle that policy recommendations (whether or not based on sociological research) are in most cases immediately transformed into political issues alerts us to a number of politically relevant factors that intervene between research and implementation. I want to touch on three of these briefly: first, the power structure of the organization; second, the extent to which different kinds of proposals affect the interests of politically important groups; and third, the values of relevant political groups that shape their response to various kinds of research and recommendations.

I have already touched on the complex question of the distribution of power in colleges and universities, and the great variations in this that exist among America's 2,000 institutions of higher education. But a few tentative generalizations can be made. First, the formal, and probably

the effective, distribution of power in colleges and universities is more diffuse than that in most formal organizations. The principle of bureaucracy tends to centralize formal power and authority at the top of the hierarchy, while the principle of collegueship tends to spread it more widely among the faculty. And there is some evidence that there is a long-range trend toward the diffusion of power through the strengthening of the principle of collegueship and of faculty participation in the government of the colleges and universities. The American Association of University Professors finds that over the past several decades faculty influence has been growing in most of the colleges they have been studying. And as Clark notes in his recent paper on faculty authority, "the ethos of academic... self-government continues to spread within the ranks of academic men."¹ There seems little doubt that this tendency is a result of the strong efforts American colleges and universities are making to upgrade themselves, and the parallel powerful influence, as models, of the most distinguished colleges and universities where the principle of collegueship is most strongly established. One result of this tendency is for the interests and values of the faculty to become more widely and more directly involved in the application of sociological research to educational policy.

The interests of the faculty are affected at many points by research which touches on the structure or content of an educational program. For example, a sociologist ventures at his peril into the arguments between the proponents of general education and those who support the discipline-centered course and early specialization. Clearly, areas of investigation vary in the degree to which they impinge on the interests of the interested parties, or more accurately, how visibly they impinge on those interests. Colleges will usually be much more receptive to applied research on issues farther removed from the interests of those who make the decisions -- for example, more receptive to research on student life than on faculty authority, to research on the social implications of residence hall architecture than to studies of the educational consequences of the distribution of power in academic departments.

IV

The use of social science research by colleges and universities is affected not only by the political nature of the institutions, but also by certain special values held by parts of their faculties and administrative

¹Burton R. Clark, "Faculty Authority," Bulletin of the American Association of University Professors, Vol. 47, No. 4. Winter, 1961, p.296.

staffs. These values are linked to the kinds of interests I have been speaking of, but in part have other roots and sources. The hostility and resistance met by social scientists who presume to study educational institutions are familiar enough, and a fair part of it emanates from teachers in the humanities. Many people in the humanities (and many outside the humanities who share their views) have grave reservations about the social effects, and indeed about the morality, of social science. In a penetrating essay, Bennett Berger has analyzed the hostile stereotype of sociology held by literary intellectuals thus:

Along with his alleged gifts for the labored cliché and the clumsy, inept sentence, the sociologist is also credited with the diabolical potential of making puppets out of men, of destroying their individuality with IBM machines, of robbing them of their 'individual human dignity,' and presiding, finally, over their total mechanization. This image of the sociologist as diabolist rests not on a conviction regarding the failure to define a specific subject matter, but on a fear regarding the success of sociological techniques, particularly statistics, which is seen by some intellectuals as threatening in two ways. First, the possibility of a science of society apparently implies the possibility of human behavior being controlled or manipulated by those who know its 'causes' or by those with access to this knowledge. This vision, fostered by stimulus-response psychology, nourished by the 'sociological perspective' which finds the source of individual behavior in group influences (and thus runs head on into the myth of the autonomous individual), and made fearful by reports of brain washing and novels like 1984 and Brave New World, is perhaps responsible for the peculiar ambivalence felt by some intellectuals toward the very desirability of a science of society. Sociology is thus seen as a potential threat to democratic society. Second, and more relevant in the present context, is the fact that the application of the techniques of science to human behavior is perceived as a threat to the viability of the most basic functions of intellectuals in the Western tradition: to comment on and to interpret the meaning of contemporary experience.²

This sense of the threat of empirical social science, shared by many intellectuals and academic men, is an obstacle to research in higher education. It is a much greater obstacle to the application of research to

²Bennett M. Berger, "Sociology and the Intellectuals: An Analysis of a Stereotype," The Antioch Review, Vol. 17, No. 3, September, 1957.

educational practice in colleges and universities.

The sources of this fear lie in the intellectual history of the past century. Modern social research, as Nathan Glazer points out,³ has its roots in the transformation of society that accompanied the early stages of the industrial revolution. Before that, the man of trained and cultivated sensibility -- the artist and intellectual -- could feel himself able to understand and interpret the social world around him. The industrial revolution, however, created in the middle of the cities of Western Europe new groups and classes which were outside the experience of the ordinary middle-class intellectual. There, in the midst of the old familiar urban types -- the burgher, the courtier, the craftsman, the tradesman, the servant, whom everybody had dealings with and knew at first hand -- was suddenly a new class, and one of such singularity and strangeness that it took on almost the aspects of a new race: the urban proletariat. "The working class, limited to contact with itself alone, unrelated except by a series of impersonal agents to the middle or upper classes or to any educated or cultured person, appeared, and was, frightening . . . The developments of the later eighteenth and early nineteenth centuries thus transformed the familiar scene of the city into a strange jungle, which cried out for exploration and safaris -- (that is, research studies) -- aimed at discovering not the secrets of Africa but the mysteries of London."⁴ The social world was no longer apprehensible to the observant eye and reflective mind, but to be understood needed the use of special techniques, especially the collection and analysis of social statistics. And the tradition of empirical social research to which we are heir grew out of the inaccessibility of important knowledge about the contemporary world to the unaided intelligence.

I suggest that the rapid growth and democratization of higher education, which is bringing into our colleges an enormous number and variety of students whose values, motives, purposes are strange to the academic man, underlie the extension of social research on a large scale to the colleges and universities. Moreover, conditions in the large public colleges and universities make it increasingly difficult to establish the old

³Nathan Glazer, "The Rise of Social Research in Europe," in Daniel Lerner, ed., The Human Meaning of the Social Sciences, Meridian Books, Inc., New York, 1959.

⁴Ibid, p. 67.

personal relation of students and teacher, and thus for the faculty member to know his anonymous students in any real sense. Increasingly, and often for much the same kinds of practical reasons that prompted the social surveys of the nineteenth century, educators turn to social science to tell them the facts about their students that are no longer directly apprehensible to the unaided intelligence of the teacher or administrator. But this process is met with the same ambivalence among cultivated men as was the earlier development of social research, because it threatens their role as intellectuals, as interpreters of their own social experience; because it asserts that much of importance, not only in the wider society but in their own classrooms and students' residence halls, can no longer be adequately known and understood by the unaided man of intelligence and sensibility, by the ordinary faculty member. And the suggestion, made often not very tactfully by social scientists, that the professor of humanities cannot grasp the social processes going on around him without the aid of the social scientist's special skills and techniques, is frequently met, predictably, with hostility and resentment. The very existence of social research on campus, as some professors put it in more candid moments, is an insult to their intelligence. And their response, made with more feeling than logical consistency, is at once to doubt that social science is more than a pretentious fraud, and to fear its manipulative consequences if it is as powerful a tool for understanding and control as it pretends to be. Thus the same developments making for the increasing opacity of social life to the unaided eye -- that is, its growing complexity -- underlie both the use of empirical social research and the intellectual's hostility to it.

V

The introduction of empirical social research into higher education seems to recapitulate its early development in Western Europe. The resistance of the English universities (and most especially of Oxford and Cambridge) to social research has been almost impenetrable. The studies that have been done in the English universities thus far are mostly straight-forward collections of social statistics to provide necessary information for certain administrative responsibilities -- for example, the gathering of information about the use by students of university health facilities, and the like. We are reminded of the similar collections of social statistics in 19th century Europe, on conditions of factory work, poverty and the like, sponsored by governmental authorities for administrative purposes. In America too, colleges and universities, especially the larger ones, have long kept detailed records and compiled statistics about their students for the use of the various administrative offices.

And increasingly in recent years, as the art and science of psychological measurement has developed, many colleges have created testing offices to design and administer aptitude and achievement and psychological tests whose results are for use by administrative officers, counselors and faculty members. But even this step has not been taken by all or even most colleges; it is probably more common for an assistant dean to have the responsibility of pulling together out of the files whatever statistical information is needed for policy planning. Who does this is largely a matter of the size of the institution; very large organizations simply need more detailed statistical information for the operation of the plant and the processing of students. In a college of 350 students the assignment of classrooms and beds is a very casual matter indeed; where there are 3500 or 35,000 students we are more likely to have an office of student personnel, with IBM machines processing coded information about increasingly anonymous students. And the systematic collection of information, for whatever reason, immediately makes possible genuine social research in colleges and universities. The line between social statistics and sociological analyses is a fine one, and lies in the shift of a passage in a report. Rates of reported illness or of drop-outs are indicators of underlying social and institutional processes, and the next step is to study those processes more directly.

But while the work of the local testing office, where it exists, or of an enterprising young assistant dean of students, can begin to shade over into something like social research into the informal life of the institution, my impression is that a number of mechanisms associated with the testing office or officer are designed to prevent this. First, the testing officers are of the institution, and presumably share the going notions about education. Second, the testing office is very explicitly restricted to the gathering of information about the students; in most cases the testers are not expected nor are themselves oriented to study the institution as a whole. And third, they are generally subordinate in status to the faculty, and are not expected to pass comment on the core functions of the institution.

Nevertheless, the very existence of a testing office on a campus introduces in some measure the results of systematic inquiry about education into educational planning. While the very definition of the testing office -- as a subordinate technical agency gathering statistical information about students -- sets forth limited terms on which it is introduced into the institution over the latent suspicions of the faculty, its impact on the colleges where it or some variant has been established may well be larger in fact than in theory. It is very hard to say what the actual impact of such agencies are on the colleges in which they have been created. But my impression is that they enter, in a peculiar and disguised way, into the controversy over the basic aims of education, and the purposes of the

institution, that goes on within many American colleges. It is hard to summarize that controversy in a word, but it is roughly a fight over whether a college ought to offer useful training or a liberal education, whether it ought to equip students with skills or shape their characters. It is easy enough for a college to say it does both, and indeed most American colleges do in fact try to do both. But departments and professors usually emphasize one or the other, by virtue of the kinds of men they are or the kinds of subjects they teach. And while all sorts of devices exist to allow a modus vivendi between those who give first priority to one or the other value, there are many occasions for dispute: over the humanities requirements for the vocational majors, or whether money should be allotted for a program of visiting lecturers, or whether courses with small enrollments should be continued, and so forth. Now, a testing office or office of institutional research may well be advised to keep clear of this controversy in any visible way. But it is likely to have an effect on the controversy by virtue of the very kinds of data it collects. For the indicators of success of a liberal education are likely to be vague, not clearly visible, difficult if not impossible to measure; its most important effects may show themselves only in the life of the student after he has left college and be scarcely distinguishable from the effects of all the other experiences he has had in life. By contrast, the indicators of successful training are the kinds of performances that testing offices can measure. A program of testing can, for example, provide information about the relative efficacy of one form of language instruction as compared with another; or show the relative academic performance on measurable indicators of one kind of student as compared with another. I think it is generally true that where there is a conflict of values, the research that is done within the framework of one set of values (quite independent of the specific findings of that research) tends to strengthen the party holding that set of values in its many skirmishes with its opponents. Those who are committed to the values of liberal education (and they are very often the professors of humanities) know this, more or less clearly, and in part it explains their general hostility to social research on their campus, and even their suspicion of the testing office, if one already exists. This is quite a different basis for their uneasiness than that which flows from their intellectual dispute with social scientists about the relative intellectual power of science and sensibility, but their effects are similar, and reinforcing.

VI

Let me now turn rather abruptly away from this discussion of the conditions that influence the utilization of social research by colleges and

universities to one or two areas in which such research on student life could have direct relevance for administrative or faculty action.

The first of these has to do with the study of student subcultures themselves. The character of a college, and the effect it has on the students who pass through it, are both very much affected by the kinds and relative strengths of the subcultures that exist within its student body. Most colleges are not monolithic and uniform but contain within themselves different sub-societies, whose members share common codes of values, attitudes, and patterns of behavior. Last year at this conference I suggested that it would be useful to distinguish four major types of student subcultures: the collegiate world of carefree fun and "school spirit"; the academic world of serious study, whose members emulate their teachers and are often preparing for post-graduate work and academic or professional careers; the world of the vocationally oriented student, whose members are training for specific jobs; and the various "non-conformist" worlds of campus radicals and aesthetes and bohemians.⁵ Not all of these subcultures are represented on every campus; and where they do exist, they are found in very different strengths and have a very different impact both on their members and on non-members.

The importance of these subcultures is that they comprise a major part of a student's college environment. The kind of subcultures a student identifies with shape the kinds of people he spends his time with, and the kinds of values and attitudes to which he is exposed, or indeed subjected. We cannot fully understand a college and its influence on different kinds of students without taking these subcultures into account.

A college which is interested in learning more about itself may find it useful to study the nature and strength of the subcultures within its own student body. The gains from such a study may be more than mere academic enlightenment: the relative strengths of these subcultures can be influenced by administrative action. A college may choose to encourage, and not merely by words, those subcultures which support its purposes, and to discourage those which undercut and sabotage its educational efforts. For example, evidence that the academic subculture is weak, or that it declines in strength over a student's four years in college,

⁵Martin Trow, "The Campus Viewed as a Culture," in Hall T. Sprague, ed., Research on College Students, WICHE and Center for the Study of Higher Education, Dec., 1960, pp. 105-124.

would suggest to many colleges that measures need to be taken to strengthen it. The faculty is the major force supporting serious intellectual commitments; it may be that student-faculty relations need to be encouraged, through, for example, small seminars or an honors program. Collegiate values are present on almost every campus, and may not be an important competitor for the student's time and energies and identifications. But where an emphasis on social life, athletics and school spirit is extremely strong, and where it can be seen to grow in weight from the freshman to the senior years, it is likely that it is serving not as a relatively harmless organizer of leisure, but as a social system which effectively insulates the student against the best efforts of the administration and faculty to encourage or create serious interests in learning, and the informed independent modes of thought that are the hallmarks of the genuinely educated man. In such a case, a college may wish to reduce the power of the collegiate culture, and of the institutions and activities which reflect and support it. Similarly, one college may accept vocational orientations as appropriate to an important segment of their students; another may wish to steer some of their students with these job and skill-oriented interests into the broader channels of liberal education. To do these things we need to know more about these student cultures, their effects on the student's higher education, and the ways they can be influenced by administrative action.

VII

The second area where research on student culture may make a much larger contribution to the life of the college is in connection with the design and layout of the physical plant. In this period of rapid expansion of higher education an enormous amount of building and reconstruction is under way on American college campuses. Many campuses are being built from the ground up; in California alone the next few years will see three new campuses of the University of California, several new state colleges, and a large number of new junior colleges. Many other institutions are undergoing expansion; still others are adding new buildings -- such as the spate of new science facilities at many colleges being financed with the help of federal funds.

This enormous building program places a large amount of educational planning in the hands of architects and engineers. In some institutions the architects are chosen and then given their heads; the academic community has the privilege of commenting, and, of course, complaining, after the buildings are up. In those cases we are in roughly the position of the theater critic reviewing a new play, except that the architect's productions are assured of a very long run indeed, whether we like their performances

or not. Many architects doing school and college work have had a good deal of experience with the problems of educational institutions, and can be counted on to make considerable efforts to shape their designs to the patterns of life and work that will be going on in their structures. In other cases, however, they are more concerned with the visual impact of their designs; the sociologist would say that their significant reference groups are made up of other architects rather than the academic community, and the results, however striking or handsome, may leave much to be desired as housing for an intellectual community.

In some institutions, an effort is made to draw the academic community into the planning of new facilities. Typically, a faculty building committee and some administrative officers meet with the architects before the plans are drawn, and are thus able to make their comments and suggestions at a time when something can be done about them. This is obviously preferable to hearing their grumbles after the fact, since a good deal of first-hand familiarity with the workings of the institution can be brought to bear on the new plans and some egregious errors avoided.

But while a group of historians, physicists and professors of language may draw on their knowledge of academic life to make useful suggestions to college architects, these suggestions are likely to be based on hunches and impressions rather than on any systematic study of the actual use of the space within which the life of the college goes on. Here the social scientist has a distinct contribution to make, a contribution based on two kinds of skills and knowledge that he possesses as a part of his professional equipment. First, he knows from studies in many areas that the ecology of activities, their physical organization, has large consequences for the way an activity is carried out, and for the kinds of relationships that develop around it. He knows, for example, how the design of a housing project shapes the patterns of friendships among its inhabitants, and how the physical organization of work in a plant or office influences the structure of relationships among the participants. Secondly, he is inclined to study these things empirically, and not merely make assertions about them on the basis of hunches and impressions. A great deal of empirical research on all sorts of problems goes on in most colleges and universities; and, on the other side, a great deal of empirical knowledge of building materials and construction methods goes into the work of the architect and engineer. But, oddly enough, the design of spaces for human use is much more a matter of hunch and guesswork, on the part of both the architect and the academics, than of any systematic research on how space is actually used -- when, by whom, and with what consequences. A modern highway engineer would not dream of laying out a road system without quite accurate knowledge of the volume and kind of traffic it will be carrying in the immediate future; we contribute to such research every time we drive

over an automatic counter or answer a questionnaire distributed at a toll gate. But when it comes to designing and furnishing a student lounge or residence hall, the decisions are too often based on architectural fashions or on ancient memories of how things were when we (and the architect) were in college.

The kind of research most needed in this area would, in large part, take the form of systematic observations of existing spaces and the uses made of them. Incidentally, I suspect that one of the reasons more research of this kind is not done is that anthropological observations do not appear to most administrators to be really scientific. He can see the results of a sociological questionnaire or an instrument to measure aspects of personality; the hard figures are there as visible proof that somebody was working. But to ask a man to loaf around in student lounges or coffee shops for a few months seems to be frivolous and indefensible. Somehow, the very large contributions to our knowledge of social processes made by trained observers in medical schools and mental hospitals, not to speak of primitive tribes, are not thought to be relevant to the "real" problems of building a new residence hall or a student union or science lab. Needless to say, I think this is a great error, both in practical terms and in its conception of the nature of science. (It also reflects our peculiar conception of the difference between loafing and working.)

Let us consider for a moment the question of student lounges. Except in cases of colleges being built from the ground up (and there the studies can be done in comparable existing institutions), every existing college has a variety of lounging spaces used informally by students for a variety of purposes. It is widely accepted that a great deal of higher education, as well as other things, goes on in student lounges. As Woodrow Wilson put it fifty years ago, "The real intellectual life of a body of undergraduates, if there be any, manifests itself in what they do and talk of and set before themselves as their favorite objects between classes and lectures. You will see the true life of a college . . . where youths get together and let themselves go upon their favorite theses -- in the effect their studies have on them when no compulsion of any kind is on them, and they are not thinking to be called upon to a reckoning of what they know." It is in the lounges, the residence halls, the dining rooms and coffee shops that this informal life of students is carried on. And the quality and character of this life may be affected by such apparently trivial decisions as whether the lounges are large or small; whether the furniture is movable or fixed; whether the lounge spaces are multi-purpose, are set aside for a single purpose, or are unplanned and available for purposes that are continually generated and continually changed by the ongoing life of the community. It is affected by whether dining tables seat four or fourteen, and whether meals are served at fixed times or are available cafeteria-style over

longer periods of time.

On every campus there will be some spaces that are "successful," spaces where students gather to study, talk, read, make music or listen to it -- in large groups or in pairs, or one by one in that most rare and precious of experiences on a college campus, solitude. The same spaces will, of course, not be used in all of these ways, but I think it possible to tell whether a space is used well or badly, whether it enhances the activities that go on within it, or is awkwardly and infrequently made to do. In residential colleges certain houses are in some measure genuine intellectual communities; others are mere sleeping space, the college equivalent of the of the dormitory suburb. While gross differences among lounges and residence halls may be known to some faculty members or a dean of students, it is very common for this aspect of informal student life to be invisible to the ordinary teacher or administrator. And the first task of research on student life, if it is to be of help in the designing of new spaces, is to identify the relative success of existing space, through a close and patient observation of the flow of persons and activities -- the same kind of close and patient observations that the anthropologist brings to his study of the social life of unfamiliar tribes and peoples, or neighborhoods, or industrial plants.

Having learned something about how existing spaces are used -- some well, some poorly, some not at all -- the researcher will want to try to learn what makes some spaces successful and others not. The shape of the space, its equipment and furniture, its location, college policy governing its use, all will affect whether and how a space is used. The observer, of course, will be especially concerned with the uses which contribute to the broad purposes of the institution; he will be especially interested in spaces that contribute in various ways to the intellectual life of the community. Is this big hall used for dances and not at all in between? Why? The walls lined with chairs, the poor lighting, adequate for dances but not for studying, the chill atmosphere when the decorations are down, all may be forbidding. Is this such an obvious example? I can only report that such spaces exist in my own university, and that few people aside from students know or seem to care how those rooms are used, as long as the parties held in them are reasonably decorous. Another example: in a certain college there is a residence hall that has smoking rooms in the center of a long corridor. On observation we learn that students who, by chance, are assigned to rooms near the central common room are drawn into the intellectual (as well as the social) lives of their hallmates to a greater extent than the unfortunates at the ends of the halls, who remain relatively isolated. Common sense would say that those students should be able to walk a hundred feet down a corridor to seek companionship; observation tells us that they just don't do it very often, with consequences for

their education. Does this tell us anything about the relation of bedrooms and common rooms in a residence hall? It should; and I suggest that our hunches about the relative virtues of one large or two small lounges may be nearly worthless. But there are enough examples of both scattered all around for us not to have to depend on our hunches.

The sociologist observing the relations between the physical plant and patterns of student life may very often have to step outside his assignment to look at faculty behavior and student policy as well. A coffee shop that is frequented by students and faculty members is simply not the same educational instrument as one that no faculty member ever enters. Can the design, and perhaps crucially here, the location of places for coffee affect the character of student-faculty relations? The question must be asked, and then studied, before it can be answered in ways that might affect architects' plans. And what of the residence halls which never see a faculty member? Can classes and seminars be scheduled in them, in ways that reinforce the conception of a college as an intellectual center, that break down the insulation between ideas and leisure and help the college penetrate student life with its purposes and concerns and challenges? Here, our consultant sociologist will be touching on basic policies and assumptions of the institution regarding what it is about. But that only demonstrates the many connections that exist among the activities and arrangements of a college, where everything has some bearing on the educational program, for better or worse.

This last illustration suggests that the sociologist will want to supplement his observations with quasi-experiments, that is, with purposeful changes in some pattern or practice whose results can be observed comparatively. And this will, in most cases, require administrative support. The carefully designed laboratory experiment, complete with its manifold controls over extraneous factors, is not possible in most live situations, nor in its purest forms desirable, since nothing is extraneous to student life if it is experienced in the situations that we are planning for. If I appear to be calling for "educational tinkering," I can only say that a great deal of tinkering with social and physical arrangements constantly goes on in colleges and universities, but rarely in conjunction with the prior planning and systematic observations that alone permit the results to be evaluated and made fruitful for future plans.

These few illustrations of the potential relevance of sociological research on student life and cultures could be extended almost indefinitely. But my major purpose has been to suggest, first, that the context of social research has a large and unrecognized bearing on how it is used; second, that the systematic study of student life, which is most likely to meet the

least resistance in most institutions, has great potential value to administrators. The growth of higher education, and the concomitant loss of direct knowledge of student life by those charged with supervising it, ensure that social scientists will be called on increasingly, if often reluctantly, to bring their special skills and perspectives to bear on the conditions in which most of them work.

But it is not at all certain that the net effect of applied social research in colleges and universities will be for the good of higher education. The great danger lies in the possibility that despite our best intentions, our research will have the political function of strengthening the hands of those who would assess educational programs by those accomplishments of students which are most easily measurable -- results on achievement tests, doctoral degrees earned, and the like. The latent anti-intellectual consequences of applied social research on college campuses are not all part of a paranoid fantasy of humanities professors, but are a real and present danger. It remains to be seen whether social science can contribute to the humane ends as well as to the training functions of American colleges and universities.

STUDYING STUDENTS IN BRITAIN AND AMERICA: CONTRASTING APPROACHES TO COMPARABLE PROBLEMS

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The most striking contrast in the approaches of people in the United Kingdom and the United States to the problems concerning us this evening is in the matter of the earnestness, the scale and the sophistication of the efforts they make to elucidate them.

A recent bibliography compiled by the Research Unit for Student Problems, which is directed by my colleague, Dr. Nicholas Malleon, at the University of London Institute of Education, comprises 181 items of which, on a rough count, more than 40, and these among the most substantial in the list, represent contributions from the United States. Of the remaining 135-140 items relating specifically to research in England, none could be said to have been conceived in the same sociological or social psychological terms, or to have been attempted on the same scale, as any part of the important and growing body of work on student cultures in this country. Nothing remotely comparable, for instance, to Professor Sanford's imposing collection entitled The American College could possibly be compiled from work so far undertaken, or even on the stocks, in England.

The comparison that I have undertaken to draw this evening, therefore, is an invidious one. In fact, my only excuse for addressing you is that it is always illuminating to draw comparisons, even invidious ones, provided that one is prepared to go a little beneath appearances and to seek explanations for the differences that one can observe. And that is what I should like to do this evening.

One's first thought is (or, rather, my first thought was) that perhaps, after all, the problems are not comparable and that this fact would explain the limited scale and the lack of sophistication in the English work. (Needless to say, it would not at all explain the quite profound difference of temper in which English educationists approach their problems as compared with you in America. The conviction, of which one is so aware here, that one should earnestly seek rational solutions to educational problems is almost wholly absent in England.)

But the problems are comparable, since both societies are subject to the same push and pull of the move toward a technological society with its profound implications for educational development.

The American response to these pressures, of course, has been readier and more flexible than the British, and the educational adaptation has gone further, as it has also in Soviet Russia. But Britain, as well as America, is on the threshold of a considerable expansion and reorganization of higher education, and in both countries we confront essentially the same problem of devising an over-all pattern of interrelationships between the various parts of a greatly expanded and diversified structure of higher education. Moreover, in both countries, and for the same reason, the problem presents itself as an organizational problem -- in the broadest sense, the problem of producing an interrelated structure -- in fact expressing a social and educational problem. This is the problem of reconciling the relationship between vocational and liberal studies; or more concretely, of the intellectual and social responsibilities of the university in a very much expanded and diversified system of higher education.

So, no comfort can be drawn from the idea that the problems confronting us are perhaps radically different; they are, unfortunately radically similar. Nevertheless, it is clear that more underlies the very manifest shortcomings of the English study of students than mere differences in the scale, earnestness and sophistication of effort; these, after all, are remediable deficiencies. Given time and a few more visits to this country by English sociologists and by other more important personages concerned with the development of higher education, one could hope to make them good. What is more important is that there is as well a very marked difference of emphasis in the work. And this marked difference of emphasis derives, I think, from the "English idea" of a university, which is described and discussed in what I think is a very illuminating paper by my colleague, Dr. Halsey, which has been circulated to you.¹

¹See Appendix A, page 151.

The distinctively "English idea" of the university, as Dr. Halsey explains, involves restricted entry to a basically residential university with low student-staff ratios, making up a community of older and younger scholars, and guaranteeing for the latter a low drop-out rate. The assumption underlying this idea is that a university education is a privilege -- "three priceless years." Three priceless years for a select minority of young people comprising, in part, the offspring of well-to-do or powerful parents and, in part, others whose exceptional talents give them a claim to an expensive subsidy from public funds.

This elitist assumption and its institutionalized expression in the universities have, of course, lost ground continuously in the face of the social and economic pressures exerted by the advance of industrialism. In the most recent period, since World War II, the eroding forces have gained great impetus and the English idea of the university must now fight for survival. It must fight for survival in face of what is by now, even in England, a widespread notion of ordinary men and women and young people that a university is a place of higher or post-school education in which one prepares for a career and in which one has one's success acknowledged by the granting of a degree.

This fight for survival of the more traditional idea of the university is arousing great passions among university teachers in England, particularly among those in the ancient universities, where the spiritual and material pleasures and "perks" of the academic life are rather more marked than elsewhere. They are manifesting a quite extraordinary array of what Professor Boris Ford has aptly termed "inherited scruples and newly-acquired vanities" in their determination not to succumb to the fate, which they feel has all but overtaken them, of becoming "Degree-Offering Government Schools" -- DOGS to go along with the CATS (the Colleges of Advanced Technology, which clamour in vain for university status and the right to grant degrees).²

Well, these are the passions of the current controversy on which I must not dwell. What is important for our purposes tonight, I think, is the fact that, subject as it is to the challenge of seemingly ineluctable social, economic, and political forces, the idea of the university as an

²Terminology invented by Dr. David Thomson, Master of Sidney Sussex College, Cambridge.

academic community is something which entirely dominates the discussion of problems of expansion in British higher education. The terms of the discussion are virtually set by the notion of an academic community and the necessary conditions for sustaining it.

The arguments about the size of universities, their catchment areas (from which they draw students), the collegiate system, residence, vacation work by students, and the tutorial system of teaching are none of them debates of principle; they are arguments about how to perpetuate the English idea of a university even under conditions in which people are coming to view a university education as something in the nature of a democratic right. When the discussion broadens, as of course it always does, into a debate over the intellectual and social responsibilities of the universities under these new conditions, "the English idea" sets quite firm limits, as I shall try to show later, to what the universities are prepared to do for the higher education of the nation.

There is very little disposition to accept what one might regard as the educational challenge of the present situation. There is very little disposition to do more than organize in face of events; very little idea of refashioning the whole idea of the university in order to meet the challenge of this educational upthrust of the new generation which is now knocking at the doors of the universities. There is very little concern to define the educational problem in fresh terms and to seek rational solutions to it. Progressives and conservatives alike take "the English idea" for granted as a norm to be defended; at one extreme by black reaction and "bloody-mindedness," or at the other, as at the new University of Sussex, by enlightened experiment designed to revitalize the traditional notion under new conditions. Only a quite insignificant minority of radicals are prepared, without guilt, to jettison "the English idea" in favour of an American-style "responsible irresponsibility" which spawns new institutions offering new degrees to more and more people in more and more subjects.

Generally speaking the desirability of smallness, or at any rate, modesty in scale, is taken for granted. A national rather than a regional or a local catchment area is likewise taken for granted; and so is the desirability of the collegiate system, residence, and tutorial methods of teaching. Those who challenge these articles of faith do so only rarely on grounds of principle. For the most part they invoke the practical necessities of the present situation, which is regarded not so much as affording an exciting challenge, but as being harassingly difficult if not actually deplorable. Thus it is not surprising, I think, that systematic inquiry into these matters, in so far as it takes place at all, tends to be pragmatic rather than questioning in spirit and confirmatory in outcome.

Perhaps this would be the moment to take a closer look at the scattered and very fragmentary literature that reflects this state of affairs. If we go back to the bibliography that I mentioned earlier, and leave aside the sections of it which comprise items dealing in general terms with the aims and methods of research, or the relations of the universities to the secondary schools, or to the wider society, we are left with six sections as follows, which I mention in order of size, as judged by the number of items listed in each: (1) study and teaching methods, 29 items, of which 13 are of general application, 16 peculiar to medicine; (2) academic performance, 26 items; (3) student health, 14 items; (4) selection problems, 12 items, of which 8 are general, 4 peculiar to medicine; (5) the social and economic background of students, 9 items; (6) student life -- in very general terms -- 9 items.

There are a number of minor points of interest to which I may draw your attention. First, there is the disproportionate contribution made to the list by studies peculiar to medical students and their education. I really cannot explain this, unless it is simply that the medicals have been inspired by what is going on over here. Second, there is something which is not apparent from what I have given you, but is a fact: the great importance of voluntary effort in all of this. For instance, of the nine studies of student life that are listed, three were undertaken voluntarily by undergraduate sociological societies; self-study is now a fashionable preoccupation of students. Furthermore, seven of the studies of selection and of the social background and performance of students were undertaken either anonymously or by distinguished academics in their spare time; for instance, by an Oxford economist or a Cambridge lawyer, whose hobby it is to make these analyses. Their findings are then published as a matter of public interest in The Times Educational Supplement or The New Statesman and Nation. These investigations take the form of analyses each year of the Oxford and Cambridge pass lists, to establish the connection between schooling (independent fee-paying, or otherwise) and academic performance at these universities; this is in furtherance of the perennial controversy over their special connection with the independent "public" schools. (Only last year, you may be interested to know, was it decided, following a rather irate correspondence with the editor, to publish in The Times Educational Supplement the class lists of all universities, thus abandoning the appearance -- which, however, cannot be dismissed as a mere pretence -- that the general public is really only interested in "Oxbridge.")

If we now look more closely at the sections of the bibliography which are of most immediate interest to us, we find that they consist, as to student life, of quite straightforward but, alas, with only one exception, entirely uncomprehensive analyses of the geographical,

social and educational origins of students. Then there are discussions of various non-academic factors influencing university studies including, of course, the special advantages enjoyed by pupils from the independent "public" schools. There are some very modest inquiries, from the educational or administrative point of view, into problems of residence and the influence of residence on participation in university life. And, finally, there are local sample surveys of student activity and opinion, particularly in matters of politics and career. As I have already mentioned, these latter tend to be the outcome of introspection on the part of undergraduates themselves.

As for the attitude of university authorities towards these questions, this can be inferred from the publications of the University Grants Committee and from the nature of the ad hoc fact-finding investigations which have been set up or commissioned by the Robbins Committee on Higher Education, now sitting to review the structure and functioning of higher education in England. Reference to both these sources makes it clear that, leaving aside basic questions of the supply of and demand for places, the authorities are mainly interested in the economic problems posed by the insistence on residence; on the social and educational background of students insofar as this influences student "quality" -- that is to say, makes for ease or for difficulty in teaching or in the maintenance of traditional standards of work; and in the problems of staffing and teaching methods raised by expansion, given the assumption that the tutorial method of teaching, or its near-equivalent, is not only normal but ideal in university work.

One is left with an overwhelming impression of an a-theoretical, down-to-earth and distinctly unenthusiastic approach to the study of student life and problems. And it seems to me that this stems from a profound consensus as to the desirable aims and organization of university life. This consensus, of course, is subject to very much disturbance; and it is concealed beneath a turbulent clash of opinion as current pressures on higher education make themselves felt. But I do not think that there can be any doubt but that its influence is pervasive and decisive. It manifests itself as surely in the utterances of opponents as of proponents of expansion in the university. What the opponents of expansion seek to defend, the proponents of expansion will not admit to attacking, or at least not to attacking willingly or irresponsibly.

So much, then, for the general picture. I want now to come a little closer to our problem, that is to say, the study of students.

In England there is a good deal of interest in what is known as "the new student." The presence of this animal in the universities is

attributed to the policy of democratizing secondary and higher education, particularly since the last war. Roughly speaking, he is thought of as able, having come up the hard way, climbed the educational ladder, and jumped the two major examination hurdles at 11 plus and 18 plus. But he is not so able that his rise has been effortless, and he is, as we say, "without background." Moreover, he is a carrier (in the terminology of Clark and Trow) of the "consumer-vocational" values which it is everybody's earnest desire should be institutionally segregated, kept out of the universities, and confined to the technical colleges. As you will have gathered from Dr. Halsey's paper, "the new student" is to be found in some strength in the civic universities which were founded to serve the urban centres of the Midlands and the North. Traces of his intrusion elsewhere, however, are viewed with great alarm and everyone most earnestly desires to transform him out of existence in the new universities, and even in his "red-brick" strongholds, with the aid of some approximation to the collegiate system of residence and to the tutorial method of teaching.

Of course, the new student is your problem too. What I should like to get out of this evening's discussion is some idea as to how one should formulate this problem, because it seems to me that this is probably fundamental to the devising of a program of investigation which will be really relevant to problems of an expanding system of higher education, whether on this or the other side of the Atlantic.

To a sociologist, the most striking weakness of much of the now widespread discussion of the problem of the new student is that it proceeds in apparent innocence of the profound implications for higher education of its changed social and economic functions. The consumer-vocational orientation of the new student is deplored; but insofar as this is not taken as an indication that expansion has gone too far, that "the margin of cultivation has been reached," that "the bottom of the barrel is being scraped" -- this is the sort of talk that is current, you see -- it is misunderstood as a simple function of an impoverished educational and cultural background. The educational problem posed by the new student in the universities is conceived of in straightforward terms as a task of social and intellectual assimilation; ill-prepared students must be inducted into a tradition of university aims and organization which is more or less taken for granted. This educational problem is then translated into a search for institutional expedients to effect the assimilation, with the further assumption that the old expedients would work as before if they could be adopted under the new conditions of expansion. The task is tacitly defined as how to achieve the same effects with smaller doses of the same medicine, put up in a cheaper prescription for much larger numbers and a different class of student, and slightly differently administered.

There are those who believe that the number of people fitted for a university education is very small, and that the educational problem presented by the consumer-vocationally oriented student is either wholly intractable or soluble only on entirely uneconomic terms as regards both money and faculty time taken off research for teaching him. Hence the use of metaphors like "the margin of cultivation" and the raising of awkward questions such as "Is he really worth it?".

Then there are those who are willing to tackle the educational problem but who rely, it seems to me, on an over-simplified analysis of this problem. It is probably true that a consumer-vocational orientation preponderates among students of low socio-economic origin who have climbed the educational ladder, from the state primary schools through the maintained grammar schools and into the universities. But it is very doubtful whether this is the beginning and the end of the problem, for, as we all know, the vocationalizing of education is endemic to scientific industrialism. The technological society puts a premium on the value of education in the labour market, and as the division of labour becomes increasingly complex, vocationalism in education will become increasingly widespread. I do not think that the tide can be turned, even in the English universities, and we must come to terms with it. A utilitarian and a vocational attitude to education cannot be confined under modern conditions to students of low socio-economic origin, even though it is probably true, and quite comprehensible that it should be true, that the incidence of these attitudes is highest among these students.

We should not forget that the universities have always been professional schools, as well as academic communities, and that the two functions have never overlapped to more than a limited extent. That is to say, the academic community, the fraternizing of teachers and gifted students, was always the privilege of a few self-elected special spirits. For most students the university has always been a professional school, but the new student asks more of the university than did his forebears. Students used not to depend entirely on the university for a general education. This they largely acquired in the course of their ordinary existence, as part of their ordinary social experience. The distinctive value, for them, of coming to a university was to get a professional training in what you might call "university style." They did not need, or get, a general education in the sense of a wide general knowledge, a liberal arts education. This was part of their background, their heritage. But they did get a general education in a much more profound sense of the term: an education in a particular field, but based on the study of very general ideas -- that is to say, a professional education in university style, which differs from a professional education obtained elsewhere precisely in that training or instruction is converted into an education through the consideration of ideas

of some generality and through critical inspection of the intellectual suppositions which underlie professional thought and practice.

However that may be, the point I am trying to make is that modern students are, and in the nature of things are bound increasingly to be, carriers of consumer-vocational values in education, regardless of their background. I am not simply saying that everybody is corrupted by the subversive cultural forces of the 20th Century's mass society; what I am saying is that the economic and social role of education in the technological society is such that everyone's aspirations are inevitably centered upon education, as those of former generations centred quite naturally on income and career.

Education is the turning point of everyone's life today. Scientific industrialism swells the professional schools in the universities, populates them with students drawn from the nation at large, and therefore, increasingly from culturally under-privileged homes, and it swamps the academic community. It swamps it numerically, but more important, it saps it spiritually in ways which so far we can only guess at, but which, I think, we should make a point of investigating.

It becomes increasingly difficult to work to the idea of a university as "a community where teachers and pupils discuss, evaluate and investigate difficult and sometimes original ideas" (in the definition advanced by Lord James, Vice Chancellor of the new University of York). The issue is perfectly clear in England and, I think, for historical reasons, much less clear here.

The universities in England have their backs to the wall. They are aroused by the public clamour for places, and the growing political interest in education as an economic investment. There is a very important body of opinion, but definitely it is minority opinion, which feels strongly about the social and intellectual responsibilities of the universities, and which wants to give an education in university style to all the public service professions, new as well as old, minor as well as major. But the difficulty is that these professions are increasing so alarmingly in number with the development of industrialism. On what basis, one may ask -- and these are very painful discussions -- can we determine the university's responsibility to one profession rather than to another? How can we defend the willingness of the universities to embrace the law, medicine, the church and the senior civic service, but to give a lukewarm and reluctant reception to education and a definite cold shoulder to business and even to social administration? And if the newer or the lesser professions are in fact adopted wholeheartedly by the universities, can the academic community possibly survive in institutions on the scale that this

development would presuppose and make necessary? Surely the tail would inevitably come to wag the dog?

It is not surprising, I think, that another important body of opinion, but also for the time being a minority opinion, is convinced that the time has come to stop the rot and close the door; to take a root-and-branch approach to consumer-vocationalism, to segregate it in non-university institutions. For the most part, however, opinion is not so aroused. The position, I think, has been admirably depicted in a statement by Sir Charles Morris, who is a very enlightened member of the minority I referred to that seeks to extend the educational mission of the university in modern society, and who is also Vice Chancellor of the University of Leeds. In describing the state of opinion in the universities as he assesses it, he says of his colleagues:

They want to go on with much the same kind of students that they have at present and to concentrate on trying to do their best for them. On balance, if it had been possible, they might perhaps, says majority opinion, have liked to select the students a little more austere and restrictively so that they could have had a student body rather more like what they think university students ought to be. But they do not feel this strongly enough, any where near strongly enough, to wish really to take any action to hold up accepted national policy.

They are pretty well satisfied in principle with the universities very much as they are, and with the students very much as they are. Furthermore, they will accept without too grave misgivings the plans for 170,000 students by 1970; they would, indeed, accept 200,000 or a little more. But they would certainly not be induced with any kind of good heart to throw the doors open two or three times as widely again and to face the implications for the whole university way of life and way of work that that would involve. They would feel that if this were done, the English universities would cease to be in any proper sense universities at all and they would hate to be involved in presiding over any such change.³

³The Expanding University edited by N. R. Niblett, London: page 23, Faber & Faber, 1962.

That is majority opinion in the universities, flanked on either side by the two minority extremes that I have described to you.

At the same time, everyone is very worried about this problem of the new student. He is said, for instance, to be the victim of premature specialization in the schools. He is supposed to be culturally dim, whether he is an arts man or a scientist, no matter. And he needs residence to insure his satisfactory induction into active participation in the intellectual and cultural life of the university. This, too, is something that would lend itself to investigation. One solitary worker, not a sociologist, Mrs. Doris Thoday of the University of Birmingham, has looked into the matter and has shown, much to everyone's relief, that even holding social class constant, residence pays, in the sense that students do, in fact, show a better score on various indices of cultural and academic participation if they are in residence.

But what about the new university teacher? It seems to me that he should be central to any work that sociologists may undertake, whether into the fate of the academic community or into the problem of the new student. Yet he has hardly been considered -- not even in America, so far as I am aware; at least, not in the same breath as the new student, which is what is important. If the academic community is to be rescued and if the intellectual and social responsibilities of the universities are to be discharged, if the new student is to be educated in university style, then the new teacher must be looked at simultaneously and in interaction with the new student. In a growing number of instances, and particularly in the civic universities in England, both teacher and student come from the same sort of background and have climbed the same educational ladder. This trend will obviously continue and I suspect that it is already a common-place here.

This similarity of background between teacher and pupil may, of course, mean simply that both are tainted with consumer-vocational values, except that in the case of the teacher they are masked by his nominal membership in the academic community. His teaching may be a job like anyone else's and in his heart he may be immune to the academic ethos. Or it may mean that both are in some degree socially uprooted. Here there are two possibilities and there is certainly no reason in either case to suppose that the common dilemma will make for mutual understanding. The teacher may be overassimilated to the academic ethos, in which case he may very well manifest quite severe signs of irritation and impatience with his students. The University Grants Committee in one of its annual reports has noticed what is a commonplace of experience in the common rooms, that the severest strictures on the new students are those that come from the younger teachers, and it seems to be worth investigating

the relevance of variables other than age to this problem. Perhaps a greater danger, however, is that the teacher may be insecurely assimilated. In this case he may be very ill at ease and may tend to transmit his own "cultural bilingualism" to his students and thereby the form rather than the substance of the distinctive academic tradition which he is supposed to represent and to personify. This is the Trojan horse within the walls.⁴

Now all these possibilities, it seems to me, need investigating. The last possibility, that we have a growing number of socially uprooted teachers, ill at ease and transmitting their own ambivalent attitudes to their students, is emphasized by critics of the meritocracy from the left, in particular by people like Richard Hoggart. As to the first possibility, that teachers and students are, as it were, in collusion in a kind of Philistine enterprise that is to sap the vital life's-blood of the academic community, I do not think it has ever been seriously maintained, let alone investigated. Nevertheless, I have an illustration, which I hope you will not feel is too frivolous, of what I think may be just symptomatic of a situation of this kind. And, as it gives me the opportunity also to mention a peculiar feature of English student life, which I think has received less attention at the hands of sociologists than it deserves, I hope you will be patient while I tell you about it in the few minutes remaining to me.

The institution is of long standing, very long standing, and is known as a "rag." Every university has its annual "rag day" or its "rag week," organized in most universities by a committee of the students' union. In "Oxbridge," rags are common but they are sporadic and they are un-sponsored by any formal student organization. Now, traditionally, a rag is a hoax. It is intended to be a skillful exercise in deception for young men and women. One poses as the Sultan of Zanzibar and elicits a full-dress welcome from the university proctors; or they set up as a road-mending party in the main streets and the traffic is held up and everybody is put out. Or they produce a fake exhibition of Ibsen relics which everybody solemnly visits and which is widely reviewed and discussed.

Well, you may say that this is simply a manifestation of the collegiate culture. It is, but the curious thing is that "rags" have survived the death of the collegiate culture. There is no doubt about the death of the collegiate culture; the meritocracy has quite killed it in Britain, but "rags" have survived. They are very much part of contemporary student life and

⁴See the comments made by Richard Hoggart, quoted by Stuart Hall in his report of a discussion on "The New Student," Universities Quarterly, Vol. IV, 152-163.

in the post-war period they have undergone a very curious change of function. People generally say of them that they have "gone too far." What they really mean is that they are a form of behaviour bordering on delinquency.

I wish I had managed, in preparing this talk, to go through The Times newspaper so that I could have quoted from the reports of "rags" which every year are a feature. I am talking from memory, but, for instance, in 1957 Liverpool undergraduates completely wrecked the inside of a theatre on the first night of the performance of a play. This was a public scandal, and there was a lot of correspondence in the press. In 1958, there was an even greater scandal when, at the installation of the Rector of Glasgow, who is always by tradition a distinguished public personage, there was such rowdyism and hooliganism that police were brought in to quell the rioting in the body of the hall. In 1959, Swansea students faked a bank raid, which caused a great deal of trouble. And in the same year there was an even bigger scandal at Reading University. On a certain day in February, The Times carried the headline "Diamond Strike in the Thames Valley by Reading Students." The Professor of Geology was reported as having made a long statement broaching all sorts of possible explanations of the strike and declaring that specimens were being sent over to South Africa for examination. Everybody was quite fascinated, there was much speculation in the press, and geologists flocked to the scene of the strike. Three or four days later the scandal broke: it was a hoax and not purely a student hoax because, in the meantime, the Professor of Geology at Reading and his assistant had given interviews on television with absolutely poker faces, describing the strike and offering their opinions on its geological and industrial implications.

There followed an incredibly irate correspondence which went on for about three weeks in The Times under the title Quis Custodiet?. And in the course of this correspondence, which I found rather illuminating, an attempt was made to elicit the proper criteria for "rags" in order to defend the contention that this one had "gone too far." It was laid down, first, that hoaxes must be based on an idea which in itself is humorous. Second, it must involve only limited inconvenience to a limited number of people. Finally, and above all, it must not involve explicit lies by any identifiable person.

Well, I thought the nicest point was made by a correspondent in the last stages of the debate who said, in effect, "There is all the difference in the world between an undergraduate masquerading as the Crown Prince of Rasselas and a professor masquerading as a professor."

I do not want to delay us by going further into all this, because we want to discuss. But I do want to make two points. First, there is more to the so-called "Joe college" culture than meets the eye. It is not merely something that is confined to the riotously living pass-men, who no longer exist in British universities. The institution has apparently survived into the new situation and plays, obviously, a different role. What that role is, I do not pretend to know. It seems to me that social anthropologists and social psychologists might get to work on this. And, secondly, and this is perhaps more important, the Reading incident of the diamond strike in the Thames Valley illustrates the possibility that under modern conditions teachers themselves may be unsure of the ethics of academic life. I do not think that anybody, except his friends who wrote in to say "Aren't people losing their sense of humour?", had any doubt that this ethic had been transgressed by the Professor of Geology and his assistant. There seems to be little doubt that a professor should not masquerade as a professor and it was never suggested that he was in fact himself taken in by the hoax; it was entirely impossible that the hoax, as it turned out, could have been perpetrated without his connivance and active assistance.

So, there we are. In conclusion, I would like to suggest that we should consider whether our whole programme of investigations into student life could not usefully be conceived in terms of these two urgent problems: the viability of the academic community under modern conditions and the educational mission of the universities. We should seek a thorough understanding, as sociologists, of the nature of the academic community, and of the conditions which sustain it, trying to discover the extent to which the way in which it is defined today reflects simply "vanities" newly acquired under pressure or genuine "inherited scruples" which should be taken seriously. We should try to define the contribution that the universities can make to the higher education of the nation, knowing as we do that they are subject to all manner of subtle pressures on their structure and functioning from the fact that they play a crucial part in modern society, in an increasingly complex structure of status and prestige. We may ask, along the lines of a recent discussion,⁵ "Can the universities, by some devious method, salvage the concept of 'education' from the pressures of a merit-minded society -- and what will be the consequences of the universities setting themselves against the main currents in society? Can they educate by stealth? And will the students -- whose fate will be sealed in the appointments pages of The Observer and The Sunday Times -- be with them or against them in this attempt to submit to

⁵See Stuart Hall, op. cit.

the narrow demands of the time?" Finally, it seems to me that we should seek answers to these questions by studying the "new student" in interaction with the "new teacher" as they face their common dilemma -- whether this stems from their both being socially uprooted or whether it stems from the fact that both are members of a consumer-oriented culture profoundly antipathetic to the traditional educational values for which the universities stand.

CAMPUS CULTURES AND THE CULTURED CAMPUS

Jonathan King, Secretary

Educational Facilities Laboratories, Inc., New York City

As we discuss the nature of college facilities, bear in mind that the college is today an institution of almost awe-inspiring variety in size, wealth, and control, as well as in faculty and student objectives. Recent studies have indicated that there are manifold reasons for going to college. One of the most popular is to receive a degree -- theoretically worth \$103,000 in eventual additional income according to the Census Bureau.¹

College going also serves to sublimate the sex drive of some of our vigorous young people, while conversely offering an image, to use a home-town Madison Avenue word, of romance, fashion, and middle-class joy to others. Upward social mobility is dispensed to desirous students, along with entree to an increasing number of vocations. College is, of course, the prerequisite for subsequent education for our more reputable professions. And although our research throws little light on the subject, I know of at least one case where the desire to learn is, at least ostensibly, the student's primary objective.²

The conflicting objectives of the institution are at least as broad as those of the students: the liberal education of students; moral development, religious indoctrination; vocational training and retraining; social development; preservation of feminine virtue; and as in most institutions, survival, security, and expansion. Direct public service is an objective of many institutions, particularly those which are state-controlled. Others acknowledge only the extension of the frontiers of knowledge and, catalogues to the contrary, consider undergraduate students a necessary nuisance in their work.

¹Jacques Barzun, House of Intellect, Harper and Brothers, 1959.

²For a further development of student motivation see Nevitt Sanford et al., The American College, John Wiley & Sons, Inc., 1962.

There is variety in our institutions, and this variety is reflected, if not loudly proclaimed, by the facilities provided.

Because there has been little scientific research on the subject of how college facilities influence their inhabitants is no reason to suppose that they do not. But because of this lack of scientific investigation it is impossible to offer a respectable research paper on the subject. Perhaps it would be appropriate to steal Louis Sullivan's title and call this a "Kindergarten Chat."

The scientific efforts to analyze the influence of environment on behavior have been limited in outlook, fragmentary in approach, and often humorous in retrospect. Almost all educational research must quake at and pay homage to the "Hawthorne" effect. That is the principle that the presence of the experimenter or experiment itself may influence the process being observed. This annoying problem plagues the physical sciences as well but with a different name. It is often forgotten that the original research carried on at the Hawthorne plant of the Western Electric Company was directed in part to facilities. The importance of the experimentation is almost entirely a result of the difficulties encountered rather than the conclusions reached.

Take, for example, the relatively simple hypothesis that a fussy task such as winding small induction coils is a function of available light. This is, after all, not a complex question such as the impact of the physical aspects of a college on student culture. I quote: "Shortly after the completion of these three tests (decreasing illumination progressively from ten to three footcandles) the representative of the company who had collaborated with Mr. Snow in the research received permission to submit two operators to still further experimentation. Two capable and willing operators were selected. They were provided with working facilities in a locker room which could be made completely dark. The illumination at the bench in this room was cut down from the original amount of light to which the girls had been accustomed to 0.06 of a footcandle, an amount of light approximately equal to that on an ordinary moonlight night. Even with this very low intensity of light, the girls maintained their efficiency. They said that they suffered no eyestrain and that they became less tired than when working under bright lights."³

Despite its humorous aspects it was not a happy result to have to report. Certainly Roethlisberger and Dickson were guilty of a great

³F. J. Roethlisberger and William J. Dickson, Management and the Worker, Harvard University Press, 1939.

understatement in concluding that "Although the results from these experiments on illumination fell short of the expectations of the company in the sense that they failed to answer the specific question of the relation between illumination and efficiency, nevertheless they provided a great stimulus for more research in the field of human relations."⁴

Many subsequent research reports on various aspects of environment have reported more success, but in extremely limited spheres. Usually such research has been related to physical comfort or lack of strain, the assumption being in these cases that such comfort is universally desirable, or productive of increased effort. But there has been very little substantial research on a complete environment in relation to productivity, educational or otherwise.

Educational Facilities Laboratories has been supporting an interdisciplinary school environment research project at the University of Michigan. The first phase was a search of the literature in the field. The school environment research group came up with abstracts of some 800 environmental research studies, but with little satisfaction. Not much of this information is meaningful except at the extreme of the scales for various aspects of environment, whether physical, social, or aesthetic. In addition to those 800 abstracts there are several filing cabinets filled with additional abstracts and studies which, because of their lack of quality or content, are labeled "Nothing" -- a remarkably fresh approach to research. Several years ago The New Yorker had a note on a bookstore in frugal New England which had two boxes on the counter, one of which was labeled "Used String," and the other "Used String, Too Short to Re-use." Most of these studies proved to be too short to re-use. The University of Michigan now has under way a case study in facilities research which may lead to somewhat more refined techniques for environmental studies.

The recent compilation of research on the college, The American College,⁵ is indicative of the rather scanty attention that qualitative questions of facilities receive from some of the more intellectual observers of the collegiate scene. In fact, the disinterest in physical surroundings would lead the casual reader to suppose that the authors were, to quote one of the footnotes in that volume, suffering from "creeping asceticism." With the exception of some parenthetical sniping at architectural efforts here and there, the Jencks and Riesman report on the Harvard house plan

⁴Ibid.

⁵Sanford et al. , op. cit.

is the only paper that really cuts into the question in depth.⁶ Primarily, Jencks and Riesman deal with the academic and social aim of the house plan. While they do not report on facilities per se, they successfully make the valuable point that college facilities are the servants of our educational objectives, not simply shelter.

It is, however, encouraging that their report indicates that an institution can hypothesize a situation, build, or as in the case of Harvard, rebuild for it, and make it work as an important factor in the educational program and in the student peer group culture.

Another recent report, entitled Student Reaction to Study Facilities,⁷ takes the "consumers research" approach to determining the study habits of college students. It reports most importantly that student study use varies inversely with the size of the space. Use of dormitory rooms for study is extensive, but less so when more than two students are in a room together. Library reading rooms are less favored by a vast majority of students than individual carrels.

There is nothing astonishing in this report, only refreshing evidence that students' habits are not as bizarre as they are occasionally reported as being. One studies where it is reasonable to, where the institutional designers have made it possible to, where one is psychologically and physically comfortable studying.

The consumer questionnaire approach has its drawbacks in that most consumers only picture a slightly modified version of what they have now. Two recent studies of faculty office space indicated that faculty members need fifty additional square feet of office space. The faculty members' responses were uniform without regard whatsoever to the amount of space they now have available.⁸

⁶Christopher Jencks and David Riesman, "Patterns of Residential Education: A Case Study of Residential Education" in Sanford et al., op. cit., p. 731 ff.

⁷Stuart M. Stoke, et al., Student Reaction to Study Facilities, The Committee for New College, Amherst, Massachusetts, 1960.

⁸At Pennsylvania State University and by the Conference Board of the Mathematical Sciences: both unpublished.

So much for research for the moment. Let us look at some of the forces hammering at our colleges: numerically, a shortage of faculty and increase of students; academically, more lectures, more independent study. In short, unless factors are manipulated to avert it, a drive towards the depersonalization of education. In addition, the colleges have in general been inclined towards rather poor utilization of instructional space. A recent EFL study⁹ indicated that the statistical norm for room utilization for small liberal arts colleges was something on the order of 40 per cent over a 44-hour week for classrooms and 25 per cent for the more expensive laboratory space. There is no doubt that space will and should be more intensively used than this. There are some who dislike this notion. Jacques Barzun says that the intellect suffers from having students sit on seats still warm from the predecessors.¹⁰ I think Barzun has mislocated the intellect.

At the same time efforts are being made to cut costs still further in dormitory construction where, to quote Jencks and Riesman, "At an average cost of roughly \$4,000 per student, the typical student residence joins two students, two beds, two bureaus, two desks, two straight chairs and 200 square feet of floor in an effort to produce enlightenment."¹¹ To relieve the grimness of all this, for despite the lawns and ivy it is often grim, we add a student union -- frequently a kind of YMCA or college fun-house and drugstore, often (but not always) less related to the other processes of the institution than the local beer joint where conversation prevails. (There is one of the latter in Berkeley called "Beer and Seminar.")

Heist and Yonge report the implicit assumption among researchers on college students that students are the products of "a) pre-college environments and experiences, and b) the predominant college peer culture and subcultures, and... " only third "c) the academic and general impact of the institution per se."¹² If we accept these assumptions, and I see no evidence

⁹John X. Jamrich and Ruth Weinstock, To Build or Not to Build; Educational Facilities Laboratories, 1962.

¹⁰Barzun: op. cit.

¹¹Jencks and Riesman, in Sanford et al., op. cit.

¹²Hall T. Sprague, ed., Research on College Students, Paul Heist and George Yonge, "Why, What, and How Considerations for Research on College Students," Western Interstate Commission for Higher Education, Boulder, Colorado, 1960.

that would suggest otherwise, it is implicit in them that a greater effort to direct the peer culture should be made, not only by college faculties and administrators, but also by those who plan facilities. For example, there is some evidence that the size of friendship groups is determined in part by an inverse relationship to the size of dormitories.¹³ I would modify that to cover the size of dormitory units rather than the entire dormitory, since significant designs such as Harry Weiss's Pierce Hall for the University of Chicago point the way toward real subdivision of groups in large high-rise housing units.¹⁴ If the object of college is to broaden student friendship groups, then this is something which can and should become part of the planning of housing.

"Propinquity" is a word which reappears with great regularity in many reports of research on college cultures. Though not often considered such by either social scientists or architects, propinquity is a factor of architecture. By this I mean not "capital A" Architecture, at the imposing beauty of which we stand in awe, but "little a" architecture, the kind in which we live and work. Propinquity in housing units is an important factor in developing the kind of student peer groups we have on campus.

Another important factor in developing student cultures and sub-cultures is dining.¹⁵ Often the facilities demand that gorge and go be the eating pattern that prevails. Not even a college student wants to dine with 999 other college students. But relationships of various dormitory groups can be strengthened by arrangement and assignment of dining space. The quality of light, table size and arrangements, and the acoustics of the dining areas, as well as the size of the space and likelihood of encountering a familiar group of fellow students, can change feeding to dining. This assumes that architecture and administration are working together toward one aim. Whatever is done by the architect can be most easily undone by administrators if they so desire.

With increased utilization of academic facilities it will become increasingly apparent that many of the amenities and the casual interactions we get in our academic buildings come from inefficiency. Students can

¹³Harold Taylor, "Freedom and Authority on the Campus," in Sanford et al., op. cit.

¹⁴Harold C. Riker with Frank Lopez, College Students Live Here, Educational Facilities Laboratories, 1961.

¹⁵Jencks and Riesman, op. cit.

meet with a faculty member after class if the room is not used for the next hour. Students can, when schedules permit, continue a discussion after class if the space is there. It won't be there for long, and consequently building planners must take these peripheral needs into account. The mathematics building which is considered by mathematicians as the best in the United States is Fine Hall in Princeton. One of its main claims to fame is the mathematics commons room in which tea is served at a given hour in the afternoon for faculty members and graduate students. Is this an unjustifiable academic luxury? No. It allows mathematicians, who do research and teach alone, to meet together and discuss their work. Surely similar facilities in which faculty and students could meet in academic but not formal classroom situations could serve student culture to advantage.

Certain other apparent luxuries like carpeting, which has many economic advantages (not including first cost) as a floor covering can help to reduce the friction of higher patterns of use. Where it has been tried it has taken some of the factory-like quality from instructional and other institutional space. It influences behavior.

In a number of academic libraries some provision has been made for coffee rooms, or snack bars, ordinarily for faculty and graduate students. These have provided some middle ground between the academic and social areas.

Some institutions are beginning to appreciate the advantages of certain rather confusing arrangements. Harvard holds tutorials in its houses. Under the Stephens College House Plan the basic core curricular instruction is carried on within the dormitory unit. Instructors, who serve as advisors as well, have their offices in the dormitory. These offices, together with a small conference room, are the only spaces purely for academic purposes. Instructional programs utilize the recreation rooms, libraries and commons rooms in the dormitories. Goddard College, a small experimental liberal arts college in Vermont, also uses the living rooms of its small housing units for seminars (which constitute the major part of its instructional program). So in these three institutions and a number of others, which couldn't be more dissimilar, this interchangeability of space functions successfully and seems, from all reports, to contribute to healthy faculty-student interaction.

But the tendency continues nonetheless to build college housing which is basically of two kinds: stripped-down motel, or impoverished hotel. By this I mean the kind of dormitory where there is a long hall lined on both sides by student rooms, the only unifying factor of which is the plumbers' contribution, the inhouse, which brings all residents on the floor together.

The severe zoning of living versus academic versus something called "activities" can only serve to strengthen the alienation of student and faculty cultures and feed the dispassionate, business-like attitudes towards education reported in many of the studies of campus cultures.

On small campuses and on those which plan little growth it is possible to intermix facilities without creating problems. It is not, however, so simple on the larger campus. Harvard has succeeded to some degree and profits thereby. Radcliffe's dormitories are nicely organized and removed from the academic area, and are proving to be something of a problem. They constitute a kind of academic Levittown from which students commute to college.

One of the features which contributes to the problem of psychological separation or disintegration of the institution is the physical separation caused by our excessively open planning at most institutions. Because buildings are set so unnecessarily far apart students are more cut off from other elements of the institution than they need to be. One of the most acute researchers in the field of how environment and people interact is Jane Jacobs, whose book, The Death and Life of Great American Cities,¹⁶ albeit somewhat partisan, is one of the few critical attempts to look at planning retrospectively. Many of the preconceptions with which planners have proceeded simply do not in fact prove to be true. This has not prevented them, in many cases, from blindly repeating the same plan without any regard whatsoever to the fact that it did not work as conceived previously. Mrs. Jacobs makes a strong case for mixed land use in our cities, for high population density, for active short streets to bring people together. Our usual housing developments turn away from the streets (often superblocks cleared of small shops) leaving the streets dangerous and deserted. There has been very little retrospective examination of facilities in colleges to indicate whether they indeed did do those things that they promised to do on the drawing boards. There is a great deal that Mrs. Jacobs says which makes sense for colleges as well as cities. One minor factor is that new enterprises rarely spring up in new buildings. They can't afford to. I think this is probably as true on the campus as it is in the city.

The California Student Center at Berkeley, designed by DeMars and Reay, and the Harvard Yard are good examples of how crowding can make an open space seem large without its being as large as many of the

¹⁶Jane Jacobs, The Death and Life of Great American Cities, Random House, 1961.

unnoticeable spaces between equally placed buildings on many campuses. For another example of space which seems important but is not especially large, look at the Piazza San Marco in Venice or the Zeckendorf Plaza in Denver. Space, like many other things, is relative; we waste too much of it on many campuses and then don't appreciate open areas because there are not crowded areas.

Because of the diversity of institutions it is difficult if not impossible to generalize about their campuses even if we divide them into arbitrary classes.

The great research-centered universities are, as Dr. Burton R. Clark has pointed out, federations. From a planning and facilities standpoint it is important to keep the various states in the federation sufficiently large and diverse to discourage fractioning of fields and disciplines. It will also serve to avoid discouraging the restructuring of disciplinary lines which is occurring in all fields but most obviously in the sciences. The division of research personnel from teaching personnel and students, unless unavoidable, unnecessarily deprives the student of some of the advantages of the kind of institution it is. Some of the states in the federation occasionally grow so large as to require division on an almost arbitrary basis.

The commuter college, on the other hand, is faced with the problem of developing a more academically integrated student culture and less of the attitude of pure vocationalism and degree orientation which was described so brilliantly in Thomas Wolfe's fictionalization of NYU as "The School for Utility Cultures."¹⁷ How to hold students on campus is the problem, and one can only speculate on the answers. Possibly one is an effort to give the student a piece of real estate more appealing than the locker, and which might be related to the library (for many commuting students lack decent study space at home). Possibly some mixture of the functions usually separated into library and student union is the answer. In any event, students need the kinds of spaces in which to meet with similarly oriented students and with faculty members.

The community college has many of the same problems as the commuter college, as well as that of dejuvenilizing its environment so as not to embarrass the returning elder or to suggest to the prospective transfer student that he must face two more years of high school.

¹⁷ Thomas Wolfe, The Web and The Rock, Harper and Brothers, 1939.

Institutional growth is a subject on which generalization is particularly difficult, for obvious reasons. There are few common elements, but there are some. Colleges' predictions of their future sizes and functions are almost invariably wrong. Consequently, an attitude which encourages more flexible, more basically uncommitted space within buildings, and a looser approach to master planning, is important in preventing the buildings on campus from becoming the Procrustean bed of education. Space not permanently committed to discipline or function which can be reconstituted without major turmoil on campus is one promising approach. Another opportunity is offered by the excessive openness of many institutions which permits rebuilding within the existing campus with both aesthetic and functional advantages.

It would be healthy to have colleges spend more time and effort on qualitative as well as quantitative study of their facilities: how they really work and why. This is often done in regard to elements of buildings, such as the different varieties of double-hung windows, but almost never is it done in regard to the social impact of the structure nor the building's impact on instructional patterns. It must be done on an institutional level because the disciplines and divisions are notoriously greedy and self-centered in regard to building needs. In addition, they have extremely limited perspectives and understandings of building design and planning.

Taken together, some of these confusing notions -- most of which violate all common principles of good planning -- such as intensive land use, some limited and controlled intermixture of buildings, and, most critically, substantial intermixture of function within many academic buildings all could play significant roles for directing and unifying some of the campus cultures. Obviously, campus cultures are not something that can be directed by brick and mortar alone, but the physical campus can help or hinder the process. Appropriate to this point are the words of Woodrow Wilson, whose literary style is far from that of the social scientists who have studied campus cultures, but whose meaning is not: "The comradeship of undergraduates will never breed the spirit of learning. It must include the older men, the teachers. . . . So long as instruction and life do not merge in our colleges, so long as what the undergraduates do and what they are taught occupy two separate air-tight compartments in their consciousness, so long will the college be ineffectual."¹⁸

¹⁸Woodrow Wilson, "The Spirit of Learning," Harvard Graduates Magazine, Volume 18, September, 1909.

SUMMARY AND CRITIQUE

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During the week we have covered an extraordinary range of topics by implication as well as directly, covering different kinds of techniques of research within this general field and ranging widely over space from problems in England to problems in California. We have ranged widely over time from residual problems in England that derived from the situation of the ancient universities, properly named, to discussions by representatives of some of our newest types of human institutions. So, any real attempt to summarize by repetition of what has been said would be very labored.

One combination of things has been concerning me as we have moved through the program. Several times it has been implied that little is yet known, and not much research is yet being done to find out, about the subculture of administrators. Then Bob Clark identified the "demonstrator" as one of four clear types found in our institutions and, in some sense, as perhaps the least valued of the types found lurking in the adult sector of the campus community. Now, observe that an "administrator" has been put in the awkward position of making the last "demonstration" on the week's program: you may begin to wonder what diabolical motives the planning committee has had.

I do have a more serious reason for questioning this batting order. I am concerned that allowing or arranging things so that an administrator has the last word could have unfortunate results. This could put much too much emphasis on pragmatic problem-solving, or too much emphasis on the use and application of research before research findings are clear. Any administrator might reflect only a semi-accurate understanding of the limitations on applications of the research, or might present other manifestations of the administrative bull in the social-science china shop.

This concern prompts me to remind you, or myself, that the Institute has been named The Study of Campus Cultures. And some of us, it seems to me, might conceivably fall into the trap of feeling that during the week we had learned a good deal about the substance of campus cultures.

After returning home and making a fairly quick review of our own campus situations, we might proceed with great confidence to make a number of administrative changes. Instead I would hope that the Institute will result for all of us in two or three outcomes that are different, in probable behaviors on our part when we do get back home. I think that's a hope that is shared by those who planned the Institute.

First, I hope that we have acquired a deeper interest in following the research that our speakers and their colleagues are and will be doing. I have the impression that we are beyond the threshold, but not very far beyond the threshold, of very fruitful work in this whole area. If we are more alert to following that research, it will be more and more illuminating to our own situations. Second, I hope we may have acquired or enlarged our disposition to foster research and study by various methods on our own campuses that will help to bring light to our own peculiar and particular situations. Third, I hope we have achieved some widening of perspective about the importance and the inter-relationships of both the obvious and the subtle factors that this type of research is emphasizing and disclosing. Then administrative decisions by whatever agents -- whether decisions are made by an administrator or a faculty group or a student group -- can be approached with greater sensitivity to such factors and relationships, even when the need and the pressure for decision and for change cannot be withstood until the point of completion of relevant research.

I suppose that this situation will continue for many of us for a long time, namely, that there will continue to be -- no matter how successful this type of research or how much of it is done -- tremendous numbers of times when an institution has to move by hunch, by intuition, by the inadequate sets of evidence that can be brought together. This type of decision-making, while it cannot be avoided, can be surrounded by a greater sensitivity to the implications of a much wider range of factors and relationships involved in each decision. An example occurred to me this morning during Jonathan King's brilliant talk, in which he said research has now shown that the amount of study-time performed in dormitory rooms goes down very sharply when there are more than two students in a room. It reminded me immediately of a passage, in Henry Wriston's autobiographical account of his experience in higher education as a college and university president, in which he indicated that quite a number of years ago when he was president of Lawrence College he made up his mind that dormitory students should live in single rooms and replanned all the dormitories on this basis. There was no research available, but I think Wriston in that situation was a good example of an administrator who was concerned about the same types of factors and relationships to which we are now getting a much more organized approach. I am sure you all recall Ralph Tyler's phrase for this kind of thing: the hope that people such as administrators

and faculty members in decision-making roles will acquire a broader conceptualization, a way of thinking about these problems, and this may be more important in the sweep of decision-making than all the array of examples of uses of specific research findings to answer specific questions.

I believe it was Bob Pace's article in the workbook which quotes Archibald Macleish as saying: "We know the answers, all the answers. It is the questions that we do not know." If we are led by experiences such as this Institute to ask more questions and to be sensitive to refining those questions more and more, and then to have the determination to find and insofar as possible refine continuously the answers, the managers of this Institute should feel gratified. It should also follow that the types of research approaches described in the program will receive more open, enthusiastic, and tangible cooperation and support.

I could, of course, use the Macleish quotation in a completely different sense: that anything I can say today is likely to add to the questions as to what all this has been about rather than to supply any answers. I certainly do not have answers. I have only a series of footnotes to the program, and I am very conscious of the fact that I have never found examples of works in which the footnotes rivalled the main text in importance or in emphasis.

One useful way to me of thinking about the objectives of research on campus cultures was epitomized by a phrase in another part in the workbook, Dr. Halsey's paper on The English Idea of a University. At the end of the first paragraph he refers to the processes of change which lie behind the differences between wish and reality. It seems to me that this comes close to putting into a phrase the whole program of the week. Both of these words -- wish and reality -- are complex and subtle. But we must more consciously study in your college and mine how close the progressive achievement comes to the collective or compromised wish; how far from the goal is the reality, if we can find out what the reality is; what are the imagined and real steps that lie between where we are and where we think we want to be.

It seems to me that the research in this area is removing rapidly -- and I hope it will remove in more and more quarters -- a naive belief that still persists among boards of trustees, among some kinds of administrators, and among surprisingly large numbers of faculty members, who wear various kinds of blinders with respect to their own institutions. This is the naive belief that the college education is simple and static and immutable; that it presents the same face to all beholders and is understood in the same way by different individuals or groups of individuals who are active protagonists on particular college stages. Certainly the whole

program has underlined for me the differential effects and arrangements and outcomes that occur for individual and institution and process, and the dynamic nature of the individual and institution and the changing processes that characterize our institutions.

This, however, also has underscored for me, at least, a difficulty in expecting absolute and stable findings from this area of research. It is almost a contradiction in terms to assume that, from these approaches to dynamic and changing institutions, even a single institution can with complete confidence be sure that yesterday's findings will be wholly relevant to today's operations -- and I mean those terms, "yesterday's" and "today's," quite literally. The institution simply will not hold still.

Perhaps I may use a metaphor about objective tests, used some years ago when there was still a lot of skepticism that objective tests could replace essay examinations in very many situations. Numbers of people in that field used to compare the advantages of the "whole series of camera shots" of the objective test against the "posed portrait" of the essay examination. We may now be, with a variety of different approaches to this type of research, at a stage when we are attempting to use neither candid nor posed shots but the high speed motion picture camera. As we succeed in bringing together different techniques and different disciplines and engage in continuous and longitudinal studies over time, we are going to need batteries of highly mobile movie cameras for this purpose. Even then the picture-taking is not going to be so critical as what goes on in the developing room and the cutting room.

I have been impressed, as I think all of you have, by the sensitivity of all of the individual speakers this week to the very important necessity of restraint in making interpretations from this type of research. Institutions will not hold still, will not resist change while we make these movies -- and these dynamic difficulties are certainly compounded when we begin to talk about studies of interactions of subcultures and of cultures. The study of a particular culture is relatively new in the terms in which we've faced it this week.

Yet it seems to me I would rather emphasize not simply the cautions, the restraint, and the humilities, but also the fact that, even though these dynamic difficulties are being compounded, the increasing amounts of attention and effort and willingness to deal with changing variables and their interactions are really causes for great optimism.

Let me try to talk a little about some of the themes that seem to me to run through the week. From some of the research being done, and in the future from the research that will be continued, we have a whole

array of questions, many of which are now unanswerable, about the use and application of research to answer policy questions on college campuses and to bring about changes in desirable directions. Much of the discussion that stemmed from or was stimulated by the various papers certainly dealt with this problem. (Again, I will be talking more about restraint than I would like to leave with you as my main impression.)

There has been a great variety of important notes on this general relationship between research and application. Howard Becker and others, both in papers and discussion, brought out, I felt, very usefully, that the research findings from a well-organized, well-planned, even very expensive and very elaborate study will be fairly discrete and that the findings from such research will have to be dealt with by the decision-making forces, whoever and whatever they are, in terms not only of the findings themselves, but in terms of much larger political and economic considerations. An effect of this concerns me for the future, but I can only express the hope that this will not be discouraging to the researchers themselves. (It could have that effect.) It happens that my college roommate was for one and one-half years one of the three economic advisers to President Kennedy and the few times I had a chance to see him in Washington during this period that particular kind of problem was brought out terribly clearly. The economic problems, if you could make them hold still, were subject to clear applications of economic techniques, professional study, and conclusions to be drawn, but whenever the economic advisers as economic professionals (not as high-level members of the President's administration) had to put their tentative considerations into the larger considerations of what was politically desirable and feasible, obviously this held the seeds of real frustration for any economist qua economist. As the power of the research on campus cultures increases and the findings become more clear, unmistakable and undeniable, this same kind of thing will happen within our institutions in terms of the use and application of research. It's at least conceivable that it's terribly frustrating to very able people in this research field. I hope this will not happen.

Another kind of concern has to do with the dynamic nature of the problems studied by the researcher. One might fall into an error in the form of an assumption that the most stable or measurable characteristics are indeed the largest and most important influences. Let me be very clear and say that this trap has been completely avoided, in my opinion, by the people reporting research this week. But as this ramifies, I think it's an assumption that we must be very sensitive about. Again, simply as an example, using an institution I know rather well, over a period of time in a very dynamic sense it's possible to characterize students at Reed, in their own time or era, as always having been students of relatively high ability and high or intensive academic motivation. This is an element of

continuity. You must also, however -- and I think the Center for the Study of Higher Education is very alert to this insofar as Reed is included in its studies -- you must contrast that element of continuity with an element of very great change over time. The bottom half of our students body is far superior, I am sure (in terms of any ways we now have of measuring this), to the bottom half of the student body ten, fifteen, twenty, thirty years ago. It's very hard to say over time which is the more important of these conclusions -- the element of continuity or the element of change.

It is also true that Reed at one time was very much a "poor man's college," and there is a great deal of very important and to a large extent valid sentiment attached to the belief that one of the functions Reed served for many years was to provide a real opportunity for social-economic mobility. There is a great concern on the campus that this is being lost as Reed necessarily, like other private colleges, has become relatively a high-cost college. These things are fairly easy to identify and to measure, but along with this another change has taken place in the College, which was once local and is now national in terms of its student body.

It is also true as an element of continuity that the College has been outstanding in practicing no racial or minority discrimination in terms of selection of students or faculty. One can estimate, I think validly, that the proportion of students from minority groups has increased within the College. What can one make of this? One should not assume this has occurred because other colleges have more discriminatory practices than they formerly did; for just the opposite, I would judge, is true nationally. Moreover, one cannot assume that Reed itself is better in this respect; for it has been quite consistent over time. Rather, the increase most probably is related to the nationalization of the student body over a period of time. When Reed was a local college, there simply were not proportionately very many representatives of minority groups in its particular area compared to other parts of the country from which it now draws.

In relation to its function for social mobility, one must also be concerned that higher student costs now negate this, despite our efforts to have a very high scholarship budget. Yet one cannot analyze the validity of this conclusion without contrasting the difference between the changing situation and cost of a specific college and the large array of factors completely outside the control of the college that have also changed over this same period of time. The difference between the situation during the depression and the situation after a very long period of the widening distribution of income, and many other factors, affect one's conclusions in this area.

Another reason for the difficulty of applying research results may be the necessity to remove certain kinds of human biases of the people within the institutions who make judgments about situations that are in fact related to, or in some degree illuminated by, the research. As an example, one college had on its admissions committee a member of the faculty who in many ways was quite useful but who, it was also clear, felt that any individual male applicant for admission who had been an Eagle Scout should be automatically denied admission. For most of us it would be very difficult to defend that proposition. It was possible to understand this individual well enough to know how he reached this conclusion -- by what processes and combinations of judgment and prejudices and biases and estimates of what the college is like. Nevertheless, it was weighting certain scales in a rather arbitrary way to have him on the admissions committee. The college, was, then, faced by another type of judgment by a different type of judge. Should he be rotated off the committee, or not? And that's not such a simple one to answer from research findings either. The judge in that case left him on it because it is very helpful to have a rank minority member on a faculty committee; it solidifies the opposition (and very readily) in a case like this. Not that one could be confident that a college should admit all Eagle Scouts, but the best way of going in that direction was probably to leave the man on the committee.

Another problem pointed up by the papers and discussion is the rather great difficulty of applying research findings, drawn from studies in one type of institution, to another type of institution. How transferable is a particular practice of one specific institution to another? I hope that the people in research will be greatly concerned about taking this question as a research project in itself. I have the impression that we do not yet have enough examples of research to be able to do this, using a variety of different methods. Sometimes to the administrative mind it is frustrating to attend lots of meetings, to find a real interest among many people in the practices of your own institution, and to find that none of these practices ever gets transferred. There's a kind of natural frustration about this, but it does seem to me to be understandable and on the whole proper. Again, we are involved with the question of restraint. An illustration came during one of the discussion periods from one of my fellow students. His college was involving, in the orientation of new students, more responsible and older students as one way of solving problems of presenting the aspects of the institution that were important to students through student eyes -- not simply through the misdirected and myopic vision of the faculty members. At Reed, again, as an example, we have done just the opposite. Orientation of new students has been handled almost entirely by students for years. It has become quite clear that, while one should be concerned about the image of the college as

seen through the eyes of older students, if new students do not also have an opportunity to learn what the faculty thinks about the college, then they are perhaps being indoctrinated, not oriented. This was somewhat confirmed last spring by a freshman girl who described what her first year had been like, starting last fall. It was her judgment that in the first month at our rather intensive college the orientation program, which on the surface looks very pleasant, was one of the worst experiences she had ever had in her whole life. If she were paid a large sum of money to go through it again she would by no means do it. The major reason was that she felt the pressure to act the role that would result in other students viewing one as a perfect "Reed type," was just overwhelming. It was a false position and a kind of overwhelming conformity to accept a student culture that was poisonous not only, I think, to this particular girl, but to many others.

This leads me to another question that has persisted through the week: the difference between secondary and external reasons for behavior (or the adoption of an assumed attitude) on the part of students and internal, individual reasons for behavior that stem from the individual's personality or his private motivations and that have little to do with the institution. Many of the papers have directly or indirectly touched on this. From administrative experience I consider this as one of the important difficulties in this type of research. To what extent do pictures of student culture that are drawn from different kinds of techniques represent a "reality"? Do we see what students believe they should conform to or what they believe in an internalized way? The former is of course an aspect of the college, but it is not perhaps the most objective picture. I do feel rather more sure that the researchers themselves will avoid falling into this than that the generality of faculty members will. Such reliance on a stereotype may, in any case, result in an underestimate of student capabilities. I suspect that in most of our institutions we underestimate, for example, the capacity of the students to contribute to the management of the college. Our faculty members are more likely to do this in general than are people engaged in research in this area, and perhaps that is reassuring. The more research that is done, the more likely is some correction. Again, I think many of our administrators and our faculty members are quite naive in underestimating the capacity of students to see through what is being said within or about an institution and its objectives, into what in fact takes place and what is the reality of the situation. And, finally, I suspect that many of us are more naive than most researchers in the area in underestimating the capacity of the students to learn and to benefit from rigorous courses of study.

One could continue for some time in discussing further these footnotes, on the difficulties of the use and applications of research findings,

but I have at least suggested my feelings that bridges need to be built and that some of them will be very difficult. I hope that in this context the continuing research will examine also the possibility that, not only will there be a dominant press in one direction from students in a particular college towards the multiple and theoretical and heterogeneous goals of faculty members in departments and divisions and of presidents and faculty committees but in a very important way (perhaps without being quite conscious of it) the faculty may be assisting in the creation of a dominant press among the students which is at odds with what the faculty would really like to achieve.

Perhaps a complex illustration will be in order here. Several speakers have identified an increasing trend towards specialization of studies at the undergraduate level. A result of this and of other related factors is a growing pressure toward the continuation in graduate school of good undergraduate students. There is less sensitivity than would be desirable to the differential selection of students who should and should not go on to graduate school. This type of pressure is recognized or admitted by faculty members only rather rarely, if you suggest to them that this is the overwhelmingly dominant trend in an institution which still talks about liberal education in a very serious way. There is also a great pressure from students, at least in colleges like ours, upon fellow students in the same direction: "first class citizenship" is accorded automatically only to those who say "Of course, what I'm going to do is to go on to graduate school." Now, there's a curious twist to this at the present day that bothers me. Because of this dual kind of pressure from fellow students and faculty members, students may have to be tougher-minded, more inner-directed, more self-directed, more independent in order to withstand such pressures if, in fact, they are not planning to go to graduate school. This may be approaching a point where there is a contradiction of terms. I may be entirely wrong. I would hope, however, that we would be sending on to graduate school relatively tough-minded individuals and not our tender-minded ones. We may be doing just the opposite because of the press of student cultures.

The Institute this week has been a liberal experience for me in an interesting sense. We have all had a chance to get a lucid picture of the researcher himself, reporting his results and his work and his efforts, and not simply reporting the results but also at work. This has been delightful to me because I think I am at least part of the time on the side of those who feel that some of the best of the liberal education in the colleges can be achieved not only when a student is reading about history or is being told about history by a professor but is close enough to the historian at work to have a feeling of "what it means to be an historian." After this week I have more feeling for what it means to be a researcher in this general area of work.

This has been useful in underlining the feeling, I trust for all of us, that out of the brilliance of these papers we are left with the understanding that research in this general area is not magic and will not result in magic. It is very hard work, it is complicated work, it requires hard and not sentimental or tender-minded approaches. I feel this way despite my human temptation to believe that all Reed students would dress and behave in more urbane and civilized ways if we simply put carpets in all our buildings. We cannot assume that the art of research will provide answers in the near future for the whole array of administrative, curricular, social, and financial questions that the research potentially can touch and is attempting to touch in ways that will be ultimately useful. Meanwhile, it is illuminating what all of us in education must be concerned about -- the study of man alone and the study of man in his environment.

APPENDICES

THE ENGLISH IDEA OF A UNIVERSITY

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The university is a social institution which, like any other institution, has aims or functions for its members, for other social groups, and for society as a whole; it has also a structure of roles defined, sanctioned and provided with facilities for their performance. The normative conception of the institution -- in this case the "idea of a university" -- may or may not faithfully reproduce an objective description of statistical norms of behaviour. Under conditions of institutional change the two norms do not coincide. In this essay I will consider the British university from these two points of view (i. e. , the "idea" of a university and the "facts") in an attempt to understand the discrepancy (i. e. , the processes of change which lie behind the differences between wish and reality).

The European university, a genus with a distinctive English species, is an institution with an unbroken, though not uneventful, history from medieval origins in Bologna and Paris. There are other more ancient traditions of higher learning in the Islamic world, in China, and in India. But, as Sir Eric Ashby has recently observed, "The remarkable fact is that among all the lines of descent of higher learning one, and only one, has adapted itself to modern civilisation and, by a process of natural selection among social institutions has displaced other lines of descent."¹ The biological analogy is apt. The notion of descent with modifications, the challenge of continuity and change, of preservation and innovation, must lie at the centre of a sociology of higher education. And the adaptability of the university to the social environment of industrialism is its crucial contemporary problem in all countries, developed or under-developed. For Britain, now

*Prepared for a symposium on higher education published in the European Journal of Sociology, October, 1962.

¹Sir Eric Ashby, Patterns of Universities in Non-European Societies, p. 3, London, School of Oriental and African Studies, 1961.

frequently assailed as an educationally backward society,² this problem has a peculiar significance.

FUNCTIONS OF UNIVERSITIES

Despite the present clamour for expansion and change it is worth emphasising that the university has fundamentally conservative functions for the culture of the society of which it is part. It is the task of the university to preserve and hand on some of the most highly prized elements of knowledge and belief in the cultural heritage. A corresponding social function of the university -- to prepare young men for elite positions in society -- is similarly a conservative one.

Nevertheless, throughout their history the European universities have been under pressure to adapt both their cultural and their social functions to a changing society; and the form and strength of the pressures have changed with every new period of intellectual, religious, political or economic upheaval.

The British universities in company with such institutions all over the industrialised and industrialising world are in an agony of adaptation to pressures towards expansion. In the short run, expansive pressure springs from the post-war birth rate bulge, in the not-so-short run from rising popular aspirations towards higher education, and in the long run (i. e., fundamentally) from the economic implications of a culture which is based increasingly on science.

²Here is a typical example from Kenneth Mellanby, referring to his experience of university colleges in the British colonies and ex-colonies: "When I was in the thick of the struggle, I was always impatient at the slowness with which we proceeded, but now development in all colleges can be seen to have been almost incredibly rapid when compared to what has happened in Britain. Between 1945 and 1960 only one university institute, the University College of North Staffordshire, with (in 1960) some 700 undergraduates, actually started work in England, and other new universities seem to be evolving very slowly." Universities Quarterly 16:204, March, 1962.

I have argued elsewhere³ that this new and developing link to the economic organisation of society is the crucial connection between education and society in the modern world. It defines the functions of the modern university. If the university has been, traditionally, conservative in its functions -- "a place of teaching universal knowledge rather than the advancement of knowledge"⁴ -- it is now, in its modern context, one of the organisations through which the content of the culture is changed by research. Higher education has become an essential part of the apparatus through which the inevitability of future social change is built into present social structure. Thus the university, which has always played the uneasy role of both guardian and critic, preserver and destroyer of the cultural heritage, becomes a sharp focal point of the conflict between continuity and change.

The modern dominance of the urge towards change, expressed particularly as a trend towards larger scale in the organisation of universities, is partly due to the new form that the cultural function of the university must take. The growth of the scientific culture implies a more elaborate and differentiated structure of knowledge and hence more specialist scholars. The nature of science itself implies research and therefore more members of the university who are not wholly or even primarily concerned with teaching. The application of science to industrial processes presses similarly towards an extension of the social functions of the university. Scientific industrialism implies expansion of the professional classes; it usually also implies large scale productive organisation and therefore expansion of the administrative classes:⁵ in general it is associated with an extension

³A. H. Halsey, Jean Floud, and C. Arnold Anderson, Education, Economy and Society, chapter 32, "The Changing Functions of Universities." New York, Free Press of Glencoe, 1961. See also the introductory chapter to this book by Jean Floud and A. H. Halsey.

See also Jean Floud and A. H. Halsey, "The Sociology of Education, A Trend Report and Bibliography," Current Sociology, Vol. VII, No. 3, 1958 (the whole issue).

⁴Cardinal John Henry Newman, The Idea of a University, Defined and Illustrated, p. ix. London, Longmans, Green, 1929.

⁵"A society like ours to-day needs a far larger elite -- in science, commerce, administration and in the professions -- than it did at any earlier time." Sir Edward Boyle, "Intellectual Responsibilities in Higher Education," Universities Quarterly 16:129, March, 1962.

of the tertiary sector of the economy which is itself partly constituted as a consumption demand for education.

FUNCTIONAL SPECIALISATION

These developments in the nature of the scientific culture and their social consequences need not, and in most countries do not, elicit a total response from the universities. Institutional adaptation to cultural and social change may take the form of increased functional specialisation.⁶ Thus teaching and research functions may be incorporated into new organisational forms. Advanced teaching and research may be segregated into quarternary institutions as in the great American graduate schools. Research may be concentrated in governmental or industrial institutes. Particular professions may be prepared for in non-university institutions; for example, school teaching in England or engineering in Russia. The Russian institutes are a clear example of highly differentiated organisations providing education in a single specialised field. In Britain or America this specialisation of function has typically gone only as far as the separation of departments and faculties (e. g. of medicine or engineering) within the university. The Soviet institutes are entirely separated from the universities.⁷ To a greater or lesser extent the rise of higher learning in industrial countries has resulted in the emergence of the university as a specialised organisation within a larger complex of institutions of advanced education.⁸

⁶For an elaboration of this, and the sequence of processes involved, in application to the changing functions of working class institutions in industrial England, see Neil J. Smelser, Social Change in the Industrial Revolution, Chicago, University of Chicago Press, 1959, 440 pp.

⁷Cf. Nicholas de Witt, Education and Professional Employment in the U. S. S. R., pp. 216-220. Washington, D. C., National Science Foundation, 1961.

⁸The Committee on Higher Education in Britain which is at present sitting under the chairmanship of Lord Robbins has this "larger complex" as the subject of its terms of reference. The recommendations of the committee must recognise and may further encourage the process of functional specialisation among institutions of higher learning.

THE RELEVANCE OF AMERICA

Educational adaptation to modern scientific culture varies from country to country in both form and rapidity. At different times since the Enlightenment various countries including France, Scotland, Germany and England in their turn have led movements of university reform. But the contemporary "models" for future development tend increasingly to be sought outside Western Europe -- in North America and the Soviet Union. Though British conceptions of the university still exercise considerable sway over the ex-colonial territories in Africa and the Caribbean⁹ and British intellectual traditions retain extraordinary dominance over the educated Indian,¹⁰ the U. S. A. and the Soviet Union now receive rather than send /sic/ the would-be planner of new universities. A Royal Commission on Oxford and Cambridge in 1922 could say "the two senior Universities of the Empire have also now the chance of becoming to a much greater extent than formerly centres of research, and of graduate study for the whole Empire and for American and foreign guests."¹¹ A generation later David Riesman, surveying the American universities, asserts that "we can no longer look abroad for our models of cultural and educational advance. . . . Europeans and Japanese, West Africans and Burmese now come here to look for models or invite American professors to visit and bring with them the 'American Way' in higher education."¹² Western Europe is becoming a cultural province of North America.

THE ENGLISH IDEA OF A UNIVERSITY

The existence of collective representations is difficult to prove and shared notions are never fully shared. Yet few would deny that there is a

⁹For a recent account see Sir Alexander M. Carr-Saunders, New Universities Overseas, London, Allen & Unwin, 1961, 260 pp.

¹⁰Cf. Edward Shils, "The Intellectual Between Tradition and Modernity: The Indian Situation," Comparative Studies in Society and History, Supplement I, 1961, pp. 81-87. "India was, and remains, an intellectual province of London, Oxford and Cambridge."

¹¹Report of the Royal Commission on Oxford and Cambridge 1922, Comd. 1588 para. 33.

¹²David Riesman in A. H. Halsey, Jean Floud, and C. Arnold Anderson, Education, Economy and Society, p. 481. New York, Free Press of Glencoe, 1961.

distinctive English idea of a university. Cardinal Newman was acutely aware of it when he wrote (in 1852) that "some persons may be tempted to complain that I have servilely followed the English idea of a university to the disparagement of that knowledge which I profess to be so strenuously upholding; and they may anticipate that an academical system, formed upon my model, will result in nothing better or higher than in the production of that antiquated variety of human nature and remnant of feudalism, as they consider it, called 'a gentleman'." ¹³

Behind this traditional English conception there lies the conflict, which Max Weber identified as fundamental to educational theory, between the cultivated man and the specialist. In his remarks on a typology of educational systems Weber saw two opposite polar types, the one designed "to awaken charisma" and the other "to impart specialised expert training." ¹⁴ He saw that, in modern, Western, rational, bureaucratised society, educational systems tend towards the latter type. But between the two opposites he recognised many educational systems which aim at cultivating the student for a "conduct of life," i. e., the style of life appropriate to the status group for which he is destined. Elements of training for an expertise as well as education for participation in the culture of a status group are present in all educational systems. However, the modern Western type of technological society maximises the former and minimises the latter. The traditional status-differentiation functions of education have been heavily modified by the requirements of selection and of socialisation into particular professional groups. "The modern development of full bureaucratisation brings the system of rational, specialised and expert examinations irresistibly to the fore." ¹⁵ Educational qualifications are, as Weber emphasised, a status claim -- a substitute for birth or ascriptive claims to a style of life.

It is in this sense that the rise of the university graduate in Britain since World War II is comparable to the rise of the gentry in the 16th Century. In a country like Britain with a past "structure of domination" other than the modern bureaucratic, the expert examination meets resistance. The great period of the English universities as status-differentiating agencies for an aristocratic structure of domination is represented by

¹³Newman, op. cit., p. x.

¹⁴H. H. Gerth and C. Wright Mills, From Max Weber, Essays in Sociology, p. 426. New York, Oxford University Press, 1946.

¹⁵Ibid., p. 241.

Oxford and Cambridge in the century and a half before the reforms initiated by the Royal Commissions in 1850 -- a point which marks the beginning of the ascendancy of the examination principle in English public life. In this period the universities were "seats in which the youth of the country could acquire a modicum of classical learning; they gave an intellectual sanction to the domination of the gentry and brought up the young men to be gentlemen, accepting and exemplifying the ideals of a class."¹⁶ Here is Lord David Cecil's description of life at Cambridge for a young Whig aristocrat, William Lamb (Lord Melbourne) between 1795 and 1799.

"For Cambridge where he went at seventeen, he could never feel the same affection. He was even less industrious there than at Eton. Rich young men always find it hard to work at a university, especially if they have the Lamb gift for pleasure. It is only the poor-spirited or the morbidly conscientious who can go on doing lessons in the flush of their first appearance in the world as mature young men able to do whatever they please. William did not even trouble to follow the regular course; along with the rest of the gilded youth at Cambridge he spent the next four years revelling, talking and making friends, sauntering the streets by day and sitting up over the port at night. However, he was too active-minded to live without any intellectual occupation. He read a good deal in a desultory kind of way. And it is likely that he profited more by so doing than if he had kept himself to the narrow path of academic study. His strong young brain, rejoicing in its own activity, ranged over an enormous variety of subjects. Mathematics, indeed, he never cared for. They were too inhuman a science. But he read widely in the classics, ancient and modern, he devoured history books, he delved into the mysterious problems of ethical philosophy. With this intellectual development came a growing interest in public affairs."¹⁷

¹⁶Wilhelm Dibelius, England, Translated by Mary Agnes Hamilton, p. 409. New York, Harper, 1930.

¹⁷Lord David Cecil, Melbourne, p. 46. New York, Grosset and Dunlap, 1956. It may be added that at this period, the 'grand tour' being impracticable because of the Napoleonic Wars, some Whig families sent their cleverer sons for further education to the Scottish universities. Melbourne went to Glasgow and soon became aware of the danger to his position in aristocratic society of too serious or 'pedantic' an interest in intellectual matters.

Industrialism may have changed the face of Britain since that time; certainly the primary and secondary school systems were invented much later, and two thirds of British university students now attend institutions of Victorian or post-Victorian foundation. Nevertheless, "the English idea" has manifested a stubborn resilience. It expresses itself partly in the conspicuousness of Oxford and Cambridge and the vagueness bordering on invisibility, the placelessness, of "Redbrick" university. Oxford and Cambridge still stand in the public mind for the older social and educational ideals of the cultivated, well-rounded member of an elite rather than the highly trained professional expert. The ideal of a university in England is accordingly either Oxford or Cambridge or a successful imitation of them.¹⁸

This means that the university should be (1) ancient, (2) autonomous, (3) collegiate, (4) dedicated to education rather than training, (5) national rather than provincial, and (6) exclusive to a carefully selected group of students rather than open to all who should wish to attend.

THE BRITISH UNIVERSITY SYSTEM

The realities of the British University system are somewhat different from traditional preoccupations. First, apart from Oxford, Cambridge and the four Scottish universities, none of the 21 universities¹⁹ and four colleges²⁰ pre-date the rise of industrialism. Oxford and Cambridge before World War II educated a quarter of the British undergraduates: the proportion is now less than a fifth and will decline to perhaps a fifteenth

¹⁸The most recent foundation, the University College of Sussex, at Brighton is aspiringly described as "Balliol by the Sea."

¹⁹In England there are Birmingham, Bristol, Cambridge, Durham (divided into two divisions, the Durham Colleges and King's College, Newcastle), Exeter, Hull, Leeds, Leicester, Liverpool, London (a federal University with 33 self-governing schools and 10 institutes directly controlled by the University), Manchester, Nottingham, Oxford, Reading, Sheffield and Southampton. In Scotland there are Aberdeen, Edinburgh, Glasgow and St. Andrews (with colleges in St. Andrews and Dundee). The University of Wales consists of four constituent colleges at Aberystwyth, Bangor, Cardiff and Swansea and the Welsh National School of Medicine.

²⁰These are the University College of North Staffordshire, the University College of Sussex, the Manchester College of Science and Technology and the Royal College of Science and Technology, Glasgow.

during the 1970's. The comparison in Table II of student distribution between universities in 1938-39 and 1959-60 indicates that the recent expansion has been borne mostly by the English provincial universities (i. e., the Victorian "Redbrick" universities in the industrial cities such as Birmingham, Manchester and Leeds and the "ex-colonies" of the University of London such as Nottingham, Leicester, Exeter and Southampton) while the share of the London colleges and the Scottish universities has declined. On the other hand, the "English idea" has been sufficiently powerful to ensure that new foundations are put down in ancient locations rather than, as the Victorian universities were, at the urban growing points of population. The cathedral town is preferred to the industrial area. Of the seven recently announced locations for new universities, only two are in the industrial north and both of these are to be situated in ancient, non-industrial towns -- York and Lancaster. The southern towns are all strongly associated with medieval or pre-industrial England: Brighton, Colchester, Canterbury and Coventry.

Second, the autonomy of the ancient colleges has not been reproduced in the modern universities and has been increasingly curtailed since 1850 at Oxford and Cambridge. This is basically because the development of educational systems for an advanced industrial society requires the financial support of the state and where economic growth is planned (or war enforces manpower control) state control over the product of education goes with state finance. Table I shows the trend of financial support for the British universities since before World War II.

TABLE I

	<u>Percentage of total</u>		
	<u>1938-39</u>	<u>1953-54</u>	<u>1959-60</u>
Parliamentary Grants	35.8	70.5	72.2
Fees	29.8	12.0	10.0
Endowments	15.4	4.3	2.9
Grants from Local Authorities	9.0	3.6	2.6
Donations & Subscriptions	2.6	1.6	0.7
Payments for Research)			(7.9
Other Income)	7.4	8.0	(3.7
	100.0	100.0	100.0

TABLE II

THE BRITISH UNIVERSITY STUDENT, 1938-1960

	<u>1938-39</u>	<u>1959-60</u>
(1) Total number of full-time students in England, Scotland and Wales	50,000	104,000
(2) Percentage who were male	76.7	76.0
(3) Percentage who were at		
Oxford or Cambridge	21.9	17.2
London University	26.4	20.9
Scottish Universities	20.1	16.9
University of Wales	5.5	5.9
Other English Universities	26.1	39.1
(4) Percentage living		
in college or hall of residence	25.1	27.0
in lodgings	33.2	50.3
at home	41.7	22.7
(5) Percentage coming from homes in		
Commonwealth countries	5.7(4.9)*	6.2(15.1)*
Foreign countries	4.7(7.4)*	4.0(13.0)*
* = Figures in parentheses are the percentages for part-time university students.		
(6) Percentage reading (excluding students doing advanced work)		
Arts	45.2	41.7
Pure Science	13.6	23.2
Medicine	24.9	12.9
Technology etc.	16.3	22.2

Source: U. G. C. , Returns from Universities and University Colleges,
1959-60, H. M. S. O. , Cmd. 1489, 1961.

The dependency of the universities on money from the central government is overwhelming. Such practical independence as the modern universities possess derives from the sentiments of the decision makers rather than the remaining private sources of income. These sentiments are institutionalised through the University Grants Committee, the Government's official advisory body,²¹ which is composed almost entirely of practicing or retired academic persons and whose recommendations are almost always accepted by the Government.²² Its reports are laid before Parliament but are rarely debated.²³ The Committee from its inception in 1919 has protected the universities from public debate while at the same time acting, especially in the period after World War II as an agent of governmental policy concerning the expansion of professional and scientific manpower. The rising financial importance of the U. G. C. with an associated decline in the power of local finance has also, in the case of the Victorian foundations, served to protect the universities from interference on the part of local laymen to whom a crucial place is given in the formal constitutions of modern university government.²⁴ In practice the effective ruling body is the Senate -- a committee of academic persons dominated by professorial heads of departments. The "power" problem is therefore

²¹Its terms of reference are "To enquire into the financial needs of university education in Great Britain; to advise the Government as to the application of any grants made by Parliament towards meeting them; to collect, examine and make available information relating to university education throughout the United Kingdom; and to assist, in consultation with the universities and other bodies concerned, the preparation and execution of such plans for the development of the universities as may from time to time be required in order to ensure that they are fully adequate to national needs."

²²The recent decision of the British Government (March 1961) not to grant the finance recommended by the U. G. C. for expansion in 1962-67 and the raising of academic salaries is most unusual and is attracting lively hostility in public discussion.

²³For a detailed account and assessment of the role of the U. G. C. see John Vaizey, "The Finance of Higher Education in the United Kingdom," in Year Book of Education: 1959, pp. 289-311. Yonkers-on-Hudson, N. Y., World Book, 1960.

²⁴The "correlation of status with self government was a constant theme of the U. G. C. and ran directly counter to the local government traditions of the founders of the civic universities." Ibid., p. 302.

largely internal to the university organisation, with the U. G. C. the only outside body of great significance.

Third, the collegiate ideal has had little success in establishing itself in practice outside Oxford and Cambridge. In the British universities as a whole slightly more men live at home (23.01%), than in college or halls of residence (22.9%), though the proportion of students in residence has risen a little since before the war (see Table II). The U. G. C. has given much verbal and some financial encouragement to Halls of Residence, and the evidence of student opinion indicates clearly that this type of university life is preferred much more than it is provided. For example, recent studies²⁵ at Imperial College, London and at Sheffield University show that neither place can offer residence to more than a handful of its students. Sheffield, though as low as 15 per cent, nevertheless has a markedly higher ratio than the London College. Yet over a third of the Sheffield students want to live in Hall; so do three quarters of Imperial's undergraduates and half of its post-graduates. In its latest report the U. G. C. welcomed "the widespread and deeply held conviction in all the universities of the role that the university residence can play in university education."²⁶ It is expected that even in the coming period of expansion there will be a rise in the proportion of students in residence, though not sufficiently to meet what the U. G. C. and the academic community generally would regard as desirable: that every student should have a chance of living in residence for two years.

Fourth, the Oxford and Cambridge conception of the cultivated man has lost ground in the curricula of both the ancient and the modern universities with the rise of science, the specialist honours degree and technology. But again the strength of the resistance to the applied natural and social sciences is shown by comparison with the American universities in which three such fields, Business and Commerce, Education, and Engineering account for half of all bachelor's and first professional degrees. Pure Science has expanded faster than technology since before the war in Britain and the Arts have not sustained serious proportionate losses. The adjustment has been made through a reduction by half of the proportion of students reading medicine. However, over the past six years the increased enrollment of new entrants in Pure Science and Technology has been proportionately about twice as great as in Arts.

²⁵Cf. A. H. Halsey, "University Expansion and the Collegiate Ideal," Universities Quarterly 16:55-58, December, 1961.

²⁶Comd. 1489, p. 15.

Fifth, the industrial foundations were avowedly provincial. They were the creatures of a non-conformist, non-metropolitan culture.²⁷ In the twentieth century and especially since 1945 they have acquired a national and international²⁸ student body and less than a quarter of university students now live at home. If this geographical revolution goes unrecognised it is because of the continuing social pre-eminence of Oxford and Cambridge. The provincial character of the industrial universities is, of course, deeply rooted in their history. The post-war foundations, on the other hand, are freer to choose a "model" or "image" with a less regional colouring.

Finally the English idea of a university has had to resist demands for hospitality not only from new branches of knowledge but also from new strata of society. In this respect its success has been remarkable and Britain has a smaller proportion of its youth in educational institutions identified as universities than any of the advanced Western industrial countries. Even if the definition is widened to include full-time students at all institutions of higher education, Britain has an exceptionally low intake. Nevertheless, the meaning of comparative statistics becomes clearer if figures for degrees granted are compared with those for enrollment. According to the enrollment figures shown in Table III the United Kingdom ranks below not only the U. S. A. (which had a comparable enrollment proportion in 1900) and Canada but also several European countries including France and Sweden. But when the number of degrees granted are compared the United Kingdom shows a higher proportion than either France or Sweden. What lies behind and explains the discrepancy is the distinctive English idea of restricted entry to a basically residential university with low student-staff ratios making up a community of older and younger scholars and guaranteeing for the latter a low "drop-out" rate. In France and Sweden both enrollment and drop-out are high. Many state universities in America have an open door to high school graduates and in the system as a whole only 60 per cent of college entrants graduate, even when all delays and transfers are taken into account. By contrast, in Oxford or Cambridge the drop-out rate is two or three per cent. In Britain, generally, the straight and narrow path to a degree for the highly selected minority in full-time attendance is paralleled and shadowed by

²⁷Cf. my "British Universities & Intellectual Life," Universities Quarterly 12:141-152, February, 1958.

²⁸About 10 per cent of full-time students at British Universities are from overseas; also a rapidly increasing proportion of the part-time students both inside and on the fringes of the university system.

other routes to the same destination -- part-time courses in technical and commercial colleges, and correspondence courses offering preparation for an external degree of the University of London. The London external degree acts as a safety valve against pressure for university education which cannot be satisfied in the "normal" way, i. e., where the conditions of the English idea of a university cannot be met.

TABLE III
PROPORTION OF 19-YEAR-OLDS ENROLLED IN INSTITUTIONS
OF HIGHER EDUCATION AND PROPORTIONS OBTAINING
FIRST DEGREES -- 1957-58

	<u>First Enrollments as proportion of population aged 19.</u>	<u>First Degrees as propor- tion of population of the median age of graduation.</u>
	%	%
U. S. A.	35.03	16.65
Canada	14.08	7.57
France	7.19	2.55
Sweden	6.40	2.23
U. K.	2.98	2.92

Source: A. H. Halsey (Ed.), Ability and Educational Opportunity,
Paris, O. E. C. D., 1961, pp. 191-192.

In consequence, taken as a whole, the emerging structure of the British system of higher education, while constituting a response to the pressures of the scientific culture, is so dominated by its history as to form a "pyramid of prestige"²⁹ of institutions fixed in the hierarchy according to their distance from the pure model of the English university to

²⁹Cf. A. H. Halsey, "A Pyramid of Prestige," Universities Quarterly 15:341-345, September, 1961.

which Oxford and Cambridge in practice most closely approximate in their aims and in their organisation. The weight of Oxford and Cambridge domination over the system as a whole may be illustrated by considering the role of the university student. The mode of recruitment of both teachers and students in Oxford and Cambridge has always set them apart from the other English universities and, to a lesser extent, the Scottish Universities.³⁰

THE UNIVERSITY STUDENT

In a sociological study of American college students, Burton Clark and Martin Trow have distinguished four types of sub-culture which flourish to varying degrees on different types of campus.³¹ The traditional culture is collegiate. It is pleasure-seeking and manifests intense loyalty to the institution though not to the intellectual purposes of the institution.

Where the latter is also present, i. e. , where the loyalties of students to their institution are articulated through the intellectual concerns of the senior members, there emerges an academic culture symbolised by the library and the seminar. Where neither is present there is a consumer-vocational culture -- a time-serving college attendance for the sake of acquiring a degree and hence a claim to a job. Where the fourth possibility exists of a high valuation on ideas and a disesteem of the institution ("establishment") there emerges the non-conformist culture which is sometimes found on the edge of academia. It should be emphasised that the authors have here tried to distinguish cultures, i. e. shared or group norms, rather than classifications of either students or universities. All four cultures may be found in any university and may influence any student. The four student cultures are derived from two variables; namely, degree of attachment to the institution and degree of attachment to intellectual ideas. The reference to "intellectual ideas" is intended to distinguish between knowledge and techniques which are "useless" and "useful" in the sense of being marketable or defined in terms of an occupational

³⁰One demonstration of this is terminological. Oxford and Cambridge have dons and undergraduates; the modern universities have staff and students.

³¹In Theodore M. Newcomb and E. K. Wilson, Editors, The Study of College Peer Groups; Problems and Prospects for Research, New York, Social Science Research Council, 1962.

requirement. The distinction made by Clark and Trow between academic and vocational sub-cultures is close, at least in the English context, to the distinction between "education" for a non-professional elite position and "training" for a clearly defined professional occupation. The intellectual superiority of the former is disputable; its social superiority has yet to be seriously challenged in Britain. These two variables in turn are strengthened or weakened by the modes of recruitment, social origins and vocational destiny of the student, the social organisation of the university and the interests of the teaching, research and administrative staff. The distinctiveness of student life at Oxford and Cambridge springs from all these sources.

Our description of Lord Melbourne's undergraduate career at Cambridge in the 18th century is largely a description of the traditional collegiate culture, but characteristically tinged with some commitment to academic values. The collegiate culture is an admirable instrument for the socialisation of a status group. Its success depends upon recruitment from those who are well-to-do, appropriately schooled, and with no obligation to acquire technical expertise in order to take up a previously assured adult social role.

The emergence of Britain in the second half of the nineteenth century as both an industrial and imperial power presented the first challenge to the collegiate culture. The rise of the examination system, the intrusion of science, the growth of the professions and the home and colonial administration mark the beginning of a double shift towards both the academic and the vocational cultures among students.

The vocational culture is fostered under circumstances where students are recruited on a wide social base from those who need and are motivated to use educational qualifications to gain occupational advantage and security. It grows most readily in large, impersonal, non-residential, "nine-to-five" institutions where administration is highly bureaucratised and the interests of the staff are inclined towards research and administration rather than teaching. Scientific industrialism generates precisely these conditions: allocation to roles by achievement rather than ascription over a widening range of occupations with a consequent endemic search for and sifting of talent and the proliferation of educational institutions as training centres for an increasingly complex division of labour. The Victorian university in the industrial provinces and even more clearly the technical and commercial colleges and evening institutes have recruited students and organised their studies in ways which unavoidably tend to promote vocationalism rather than the academic alternative of traditional collegiate culture.

At each stage in the development of pressure from the wider society, Oxford and Cambridge have modified their recruitment of students, their curricula and their internal organisations in such a way as to retain an advantageous view of the avenues to the most prestigious positions in business, politics, administration and the professions. The up-thrust of popular aspirations towards education in French colonial territories has been contained by the principle of instruire la masse et d'égayer l'élite. The British have followed this principle at home as well as abroad. With the decline of the collegiate culture has come rising support for academic culture by a slowly swelling tide of academically selected students.³² Academic selection is imposed most heavily on the lower social strata (i. e. , those who attend state schools) but is gradually spreading upwards into the middle and upper classes.³³

In other words, as the qualifications for elite positions have been modified by the growth of a scientific and technological society,³⁴ so the balance between collegiate and academic culture has shifted in the ancient foundations on the basis of a more stringent academic sifting of candidates for admission. The social and intellectual composition of the student body has changed and is changing but identification with the institution has not,

³²The reform of the colleges after 1850 was important in supporting the academic orientations of undergraduates by strengthening the scholarly interests of dons.

³³Nevertheless, the social and educational origins of students in the ancient and modern universities remain markedly different. The proportions coming from manual working families in 1956 were: for the university system as a whole 25%, Cambridge 9%, Oxford 13%, London 21%, Scotland 24%, English provincial universities 31%, and Wales 40%. Similarly, while only 27% of the Cambridge entrants had come from grammar schools maintained by local education authorities the percentage at Oxford was 39, at London 58, in Scotland 66, in the English provincial universities 71, and in Wales 90.

(Source: Robert K. Kelsall, Applications for Admission to Universities, Chapters 3 and 4. London, Association of Universities of the British Commonwealth, 1957.)

³⁴The resistance to professionalisation of business and administration, i. e. , to any occupational skills not clearly derived from the natural sciences, has been enormously strong in the British universities compared with those in North America.

in the process, declined. The symbols of attachment have changed -- the degree classification statistics now matter more to a college than the position of its rowing eight. The anticipatory socialisation of family and public school connection with a college tends more and more to be displaced by the grammar school roll of honour of boys (and girls) winning open scholarships and exhibitions. What is essential is that both types of anticipatory socialisation are effective in enhancing a proud identification with the college and a corresponding devaluation of the other universities.

CONCLUSION

The traditional functions of the European university, cultural conservation and social status differentiation for an elite, have been transformed by the rise of scientific industrialism until higher education is a powerful source of cultural innovation and of socialisation into a wide range of new professional, scientific and technical occupations. The response of European universities to modern conditions has varied from country to country. To a greater or lesser degree it has involved expansion of institutions of higher learning and the differentiation within higher education as a whole of "the university" with more specialised functions.

In Britain, this whole process has been heavily influenced by an ideology of education which goes back to the pre-industrial period when Oxford and Cambridge were patronised largely by the aristocracy and the gentry. The influence of the English idea of a university, with its strong orientation towards the social role and culture of the gentleman, may be traced throughout the modern history of the industrial expansion of higher learning. It has expressed itself in resistance to the decline of the humanities and to the displacement of fundamental by applied disciplines of study. It has numerous manifestations in the role set for itself by the University Grants Committee as mediator between the universities and the state -- between independent corporations of scholars and their main source of financial support. It is reflected in the desired pattern of internal organisation of teaching and residence and even in the siting of the post-war and proposed new foundations.

Above all, the "English idea" has maintained a firm control over the expansion of the universities, restricting their enrollments to a tiny minority of highly selected entrants. Expansion has taken place and will continue, but it is taking the form of a developing hierarchy of institutions with specialised functions for the changing culture of scientific industrialism

and the changing occupational structure of its elite positions. Oxford and Cambridge retain a secure position at the apex of the prestige pyramid through advantageous relationships both to the sources of recruitment of students and staff and to the career placement of alumni.

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